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WE ARE BOOKING ORDERS

every day for advertisements in *The Chemists' and Druggists' Diary* for 1905. It is wise for business houses to arrange for their announcements thus early because the *Diary* has to be despatched to Colonial buyers, so that they may get it before the New Year. Our experience is that it pays to

CONSIDER COLONIAL CUSTOMERS.

They rank among the best buyers in the world, and *C. & D.* Colonial subscribers are notable for responding to advertisements. The same applies to our unique subscription-list in other parts of the world and at home. As the *Diary* is used for a whole year and every day of the year, advertisers will recognise that this is an opportunity which they should make the most of. If they do not know how, they should send their rough ideas and materials to the Publisher, at 42 Cannon Street, London E.C., and he will get his staff of advertisement-designers to work up the matter for them. This should be done as soon as possible.

APPROVED REMEDIES.

WE remind our subscribers of the offer made in our last issue to publish in the *C. & D. Diary*, 1905, formulae for any medicinal preparations which they may desire to sell unstamped under the special exemption to chemists provided by the Medicine-stamp Act, 1812. The space in the *Diary* which we have reserved for these is limited. Each formula should be written on a piece of paper by itself, with the name and address of the sender (which will not be published).

Summary.

THE latest particulars about the Glyn-Jones testimonial are given on p. 583.

THE NAMES of those who have passed the Major and Minor examinations at the meeting of the Board of Examiners in London are printed on p. 592.

SEVEN BANKRUPTCY inquiries are reported in this issue. The aggregate liabilities in four cases are about 4,000*l.*, and the assets are valued at 250*l.* (p. 585).

ESTATES valued at over 1,200,000*l.* are represented by eight wills noted on p. 588 as of persons connected directly or indirectly with the drug-trade or chemistry.

ETHER DRINKING is causing some alarm in Glasgow, and the Town Council have resolved to take all necessary steps to have ether included in the poisons schedule (p. 569).

A STOCKPORT CHILD was suspected to have died from poison administered in pilules, but analysis has proved the absence of poison, and that death was due to congestion of the lungs (p. 567).

A RETAILER sold a food and drugs inspector four penny packets of cream of tartar. The inspector mixed them and divided into three. This the Magistrates have held to be wrong (p. 585).

MR. R. B. BETTY, who failed to get into the Pharmaceutical Council at the last election, considers he has lost prestige and wants to resign the secretaryship of the London Chemists' Association (p. 577).

THE BELFAST RECORDER has dismissed the appeal of the retailer who was convicted under the Sale of Food and Drugs Acts for selling ginger-wine containing 7.2 grains of salicylic acid per pint (p. 585).

MR. LORD GIFFORD addressed his pharmaceutical *confrères* at Blackburn on Tuesday, criticising some things, but chiefly urging that his organisation scheme, which his Council colleagues pooh-poohed, should be adopted (p. 577).

PROFESSOR NIELS FINSEN, the Danish physician who introduced the light-cure of lupus, died last Saturday. We also record the death from heart-failure of Mr. Melville-Bergheim, managing-director of Plasmon (Limited) (p. 588).

THE TURPENTINE-MARKET is again disturbed owing to the distillers deciding to diminish the output by 10 per cent. We suggest that our Government authorities should endeavour to encourage the production of turpentine within the British Empire (p. 582).

FURTHER NOTES from the meeting of the American Pharmaceutical Association at Kansas City include observations by Mr. E. H. Gane on cod-liver oil tests (with an illustration of a novel stock-container for the oil), and a description of Mr. Wilbert's label-keeping arrangement (p. 576).

IN CONNECTION with the recent morphine-poisoning case we recall that the Poisons Committee recommended such solutions to be put in Part 1 of the schedule. The Pharmaceutical Council moved in the matter as far back as March, 1903, but it has been forgotten since. We suggest that it should be revived (p. 580).

BUSINESS in drugs and chemicals is fairly good, many articles having a firm tendency. Sugar of lead, lycopodium, cloves, turpentine, and white pepper are dearer. Buchu, manna, menthol, eucalyptus oil, star-aniseed oil, and palm oil are firmer. Chamomiles and shellac are lower. Tragacanth and acetic acid are very firm, and opium and quinine are dead letters (p. 593).

IN a camphorated-oil case under the Sale of Food and Drugs Acts heard in Kensington this week Mr. Kirby endeavoured to persuade the Magistrates that there is no B.P. standard for the oil. At the same time Mr. Cassal, the public analyst, gave particulars of experiments by himself disproving that camphor evaporates from the oil to an appreciable extent. The Magistrates convicted (p. 584).

THERE IS TROUBLE in South Africa now about the spirit-duty on tinctures. It seems that the information about Natal given in the *C. & D.* of August 13 came upon Cape houses as a surprise, and in spite of strenuous efforts Natal and the Transvaal decline to raise the duty beyond 10 per cent. Lord Milner now has the matter in hand. The circumstances are fully detailed in an article beginning on p. 581.

THE *C. & D.* REPRESENTATIVE with the Society of Chemical Industry party in the United States sends his impressions of the journey and doings as far as St. Louis, besides a synopsis of Sir William Ramsay's address on inorganic chemistry to the International Congress there. In this Sir William describes more fully how the non-material emanation from radium turns glass into new forms of new elementary matter (p. 574).

English News.

Local newspapers containing marked items of news interesting to the Trade are always welcomed by the Editor.

Brevities.

Mr. H. J. Owen has been appointed as dispenser by the Guardians of the Cardiff Union.

What is rum? According to the public analyst of Stockport, it should contain 400 to 600 parts of compound ethers to every 100,000 parts of absolute alcohol.

For storing petrol without a licence, and keeping it in the same place as calcium carbide, a Wolverhampton firm have been heavily fined. It was stated that such a juxtaposition might lead to an explosion.

At an inquest held on a child at Islington on September 28, the doctor said a dummy teat had been kept fastened round the child's neck, and, by twisting, the child had tightened the cord and become asphyxiated.

The teeth of a sheep purchased from a farmer at Boscastle, Cornwall, were found to be coated with a metallic substance, which was tested by Mr. James Cocks, chemist, Edgcumbe Street, Stonehouse, and proved to be gold.

A permanent exhibition of hygienic products and appliances has been opened at 34, Devonshire Street, Harley Street, W. The exhibition is under the auspices of a medical council, and the value of each exhibit is investigated by an examining board. There are many trade exhibitors who have secured ample space for their products.

Among the "passive resisters" who have been summoned before magistrates in various parts of the country recently for non-payment of the Education Rate appear the names of Mr. Thomas Suckling, chemist and druggist, Linton, Cambridge; of Mr. Luther Bonch, chemist, Wigton; and of Mr. Ebenezer Housden, chemist's assistant, Hitchin. In default of payment Mr. Housden was sent to prison for one month. After serving fifteen days, however, he was released.

Contracts.

A further instalment of contracts has been settled as follows:

Belper.—Messrs. James Calvert & Son, Belper, for chemists' requisites to the Union.

Cannock.—Mr. J. McIntyre, chemist and druggist, Cannock, for methylated spirit 2s. 8d. per gal., sanitas disinfectant fluid 11d. per pint, and Jeyses' fluid 4s. 4d. per gal.; Mr. W. Harper, chemist, Bridgtown, for medicated cotton wool 1s. 3d. per lb., clinical thermometers 1s. 9d. each, lime-water 2 $\frac{1}{4}$ d. per quart, linseed meal 2 $\frac{1}{2}$ d. per lb., and spirit of turpentine 3s. 6d. per gal.; Mr. T. W. Garland, chemist, Cannock, for dressing-combs 5s. per doz., feeding-bottles 10s. per doz., fullers' earth 3 $\frac{1}{2}$ d. per lb., medicated lint 1s. 7 $\frac{1}{2}$ d. per lb., syringes 4s. 6d. each, and tow 5d. per lb.

Coventry.—Mr. H. Welton to be chemist to the workhouse.

Dartford.—Mr. W. J. Tucker, chemist, Dartford, for disinfectants; and Messrs. Burgoyne, Burbidges & Co., Coleman Street, E.C., for drugs and druggists' sundries to the workhouse.

Gravesend.—Mr. E. Millhouse, of New Road, to be chemist to the workhouse.

Isle of Thanet.—Mr. D. T. Evans, chemist and druggist, Margate, for drugs, medical and surgical appliances for the Birchington district, 7l. 12s. 11d.; for the Margate district, 26l. 18s. 6d. Mr. G. M. Arrowsmith, chemist and druggist, Broadstairs, drugs, medical and surgical appliances for the St. Peter's district, 12l. 13s. 1d.

Islington.—Bovril (Limited), for bovril to the workhouse, to take the place of beef-tea.

Ludlow.—Mr. G. Woodhouse, chemist and druggist, Bull Ring, for quinine 1s. 6d. per oz.; linseed meal 1s. 8d. per 12 lbs.; carbolic soap 19s. 6d. per ewt., and arrowroot 2s. 4d. per lb., to the Union.

Poplar.—Messrs. Krohne & Sesemann, for surgical appliances to the Board of Guardians.

Reigate.—Messrs. W. H. Fowler & Co., pharmaceutical chemists, Redhill, for drugs to the workhouse.

Suleoates (Hull).—Mr. T. Kenny, Hull, to supply drugs and surgical appliances.

Todmorden.—Mr. G. B. Wright, chemist, Hebden Bridge, for drugs to the workhouse.

Analysts' Reports.

The public analyst of Hackney reports that during the past quarter he examined three samples of sweet spirit of nitre and three of paregoric. All were in accordance with the requirements of the B.P. Of eight samples of olive oil, five were genuine, one was adulterated with 50 per cent. of arachis oil, and the two others with 5 and 4 per cent. of added water respectively.

The public analyst of Stepney, in his quarterly report, states that during the past three months he examined two samples of cream of tartar, and one each of camphorated oil and milk of sulphur. All were genuine except one of the cream-of-tartar samples, which was adulterated with 20 per cent. of lime salts. A caution to the vendor was deemed sufficient to meet the case.

Through the Window.

Mr. J. E. Turner, chemist, of London Street, Basingstoke, sustained serious loss last week through the vagaries of a horse which backed a trap through his shop-window. The back of the trap came into contact with a solid iron column, one of the main supports of the shopfront, and this stopped its further progress, otherwise the window and its contents would have been utterly wrecked. After the broken glass and wood-work had been cleared away the window was boarded up. The shopfront, which was of modern design and of elegant appearance, had been in only eighteen months.

S.A.O.

The second Saturday Afternoon Outing of the season in connection with the employés of Messrs. Evans Sons Lescher & Webb (Limited), of Bartholomew Close, E.C., was held at the Plough Inn, Elstree, on September 24. The weather, the viands, and the concert were all excellent, with the result that the party fully enjoyed themselves. At the tea, Mr. C. Anderson presided, in the regretted absence of Mr. Bradley and of Mr. Brown, chairman and vice-chairman respectively. During the afternoon a telegram from the directors conveyed best wishes for an enjoyable time. Songs were rendered by Misses Lilian Nurse, L. Bateman, A. Williams, Honora Smith, A. B. Robbins, and N. Wilson, and by Messrs. Radley, Dyson, Garner, Dicks, Wright, and Canner. Miss E. Blows recited, and the accompanist was Mr. A. B. Ibbs.

A Chemist's Vote.

At the sitting of the Blackburn Revision Court on Tuesday, Mr. Norris, the Liberal agent, sought to substitute the name of one chemist for that of another. It was stated that the new tenant had paid rent since January 1, and it was elicited later that he had not received his Minor certificate until July 6. The Revising Barrister (Mr. T. Shepherd Little) said that in the circumstances he was not inclined to assume that the man had been the tenant since January 1, as that would mean he had been breaking the law between January and July in regard to his business. Even the information that the new tenant had had the services of a qualified chemist at his shop was not evidence which would justify him in removing the name of the former tenant. Therefore he could not replace the name.

Birmingham Notes.

"Benzooated amylic alcohol" is a new name for a well-known official alkaloidal solvent. This emanated from a wholesaler's establishment, the handiwork of a junior.

The two combatants (medicine and pharmacy) in St. Paul's Ward are not to have it all their own way. Mr. J. H. Manton has been asked to turn the tide, if he can, in the Liberal interest.

Four Indian students have become attached to our University by virtue of scholarships to encourage technical education in connection with the province of Bengal. These scholarships are worth 150/- a year, besides travelling-expenses, all of which will be borne by the Indian Government.

Messrs. Boots (Limited) have fitted up a new shop at 166 Broad Street in a very elaborate and costly style, with three large electric lamps on the outside. The old shop is to let; this was nearer the Five Ways than the new one, but on the same side. In this neighbourhood there is a goodly number of chemists' shops and a valuable *clientèle* resides near—viz., in Edgbaston.

Dr. Kirby, in a letter to the "Post" on the case of a man who died from poisoning by liquid ammonia, states "there is a popular fallacy that all cases of poisoning should be treated by an emetic. Nothing could be more erroneous. Poisons which are swallowed are of two classes, the corrosive (strong acids and alkalies) and the non-corrosive. For the latter class emetics should generally be given, but for the former nothing could be more dangerous than the violent action of an emetic."

What "Robin Goodfellow" in Saturday's "Mail" calls "cool effrontery" is contained in the story which he relates of a lady whose five-year-old son would not go to bed without a "comforter." When paterfamilias returned at 11 P.M., instead of thrashing the youngster, he sent the maid to the chemist's for another "dumumy." The chemist had gone to bed, and the bell aroused him. He grumbled audibly, and his ire increased when, on taking the article to the door, he had to return to fetch change out of half-a-crown for a twopenny teat.

The Shop-hours Act.

Mr. J. A. Stacey, Secretary of the Early Closing Association, informs us that the Board of Management of his Association are of opinion that the Act is the greatest concession which Parliament is likely to make at present to the Association's Bill. The Board's preliminary inquiries show that a canvass for an immediate earlier closing on each week-night may not be successful throughout the metropolitan area, but much good can be done in various centres, and generally throughout the metropolis and Kingdom, to confirm and consolidate in the first place the weekly half-holiday. Subject to his approval, the Board shortly purpose making the President (Lord Avebury) their principal guest at a banquet to commemorate this instalment of late-shopping reform.

Sheffield Notes.

The contest in the St. Philip's Ward between Mr. J. M. Furness, J.P., chemist and druggist, and the official nominee of the Conservative party, ended on Tuesday by Mr. Furness's opponent being returned to the Council by a majority of 420, receiving exactly 1,000 votes.

The local Press on Tuesday called attention to the fact that among the pictures now on view at the Royal Photographic Society's annual exhibition in London is a three-colour one by Mr. J. Gilbert Jackson, chemist and druggist, an official of the Sheffield Photographic Society. The picture is produced on the Slavik Multico paper, which consists of special "carbon" tissues, with thin superimposed layers of pigmented gelatin, which give an approximation to natural colour effect from ordinary negatives. This print was made from the same negative as that from which the picture of Haddon Hall in the C. & D. of August 13 was made.

A Fire Scare.

On Sunday evening, September 25, there was quite a sensation in North Street, Gosport, a crowd of about a hundred curious people gathering around the shop of the Timothy White Company, chemists. Rumours of all kinds filled the air. Some maintained that the place was full of burglars, while others were of opinion that a serious fire had broken out. The excitement was added to by the Fire-brigade rushing up to the spot in anticipation of a "job." Employés who live in the vicinity were called in haste, and eventually the Fire-brigade were given permission to enter the shop by a top window and turn out a gas-jet that had been left burning!

A Burgling Tour.

A gang of burglars ransacked a number of shops in Sloane Street, W., during the last week-end. The men obtained access to a row of sky-lighted shop-roofs, and practically took their choice as to which they should enter. At one establishment they merely annexed a dozen pairs of scissors. Moving on to the premises of Messrs. Cooper & Co., pharmaceutical chemists, the scissors were used to break open two desk-drawers, for four pairs were found broken. From the drawers 20*l.* in cash was taken.

A Chemist Missing.

Mr. Edward C. Perry, chemist and druggist, of Basingstoke, is anxious to obtain information as to the whereabouts of his son, Wallis Bennett Perry, chemist and druggist, aged twenty-five, who left home for a bicycle ride

on September 23, and was last heard of riding through Hook, Hants, towards London. The description is as follows: Height 5 feet 4 inches, hair black, dark brown thin moustache, burn scar on left side of mouth, top little finger right hand stunted, slightly built. He wore a grey cap, blue serge suit, stand-up linen collar, and green tie with red spots.

The Coroner and Mr. Purdue.

At the London Hospital, on September 27, an inquiry was opened into the death of Jennie Matilda Palmer (29), of Bartle Avenue, East Ham, who, after giving birth to a dead child, was seized with violent pains and died after being removed to the hospital. Her husband had seen her drinking something from a bottle which made her sick. A witness said the deceased told her that she visited a herbalist at Canning Town. She saw bottles at deceased's house with the name of "Purdue" on the labels.

Charles John Purdue, herbalist, Roscoe Street, Canning Town, stated that he had seen the dead body, but failed to recognise it as that of anyone he had seen before. He did not know the name of Palmer—no woman had consulted him giving the address of Bartle Avenue, East Ham.

The Coroner: Well, bottles have been found in the possession of the dead woman bearing your name on the label.

Witness added that the pills he sold contained chamomile, aloes, cloves, and ginger.

The Coroner: Have you ever used any instruments?—No, sir.

A Juror: Are you the same herbalist that keeps a shop in Limehouse?—I have a shop in Galt Street there.

After medical evidence, the Coroner said that there was no positive proof who the person was who had treated the deceased. A description of the man had been given to the police, which may or may not tally with the herbalist who had given evidence. Mr. Purdue had been before him on many occasions, and was generally very perky, but he was not so that day. The jury returned a verdict that deceased died from general peritonitis, and they requested the Coroner to send the facts of the case to the Medical Defence Union.

Not the Pilules.

The adjourned inquiry into the death of Mary Sheldon Hague, the five-year-old daughter of a Stockport corn-salesman, was resumed at the Stockport Infirmary on September 28. At the opening inquiry on August 29, the mother of the deceased stated that the child, who had just recovered from measles, had eaten five or six homoeopathic pilules "for the nerves." Dr. Bentley was called in, and ordered the child's removal to the infirmary, where she died. The pilules had been previously given to another child with beneficial effects, but the deceased had obtained possession of the bottle unknown to the mother, and eaten a number. The inquiry was adjourned for a fortnight and again adjourned until September 28, when Mr. W. J. Fergus, surgeon, said he made a *post-mortem* examination of the body of the deceased, but could not find any evidence of poison. He took the stomach, intestines, and vomit to Mr. J. Carter Bell, the county analyst, for analysis.

The Coroner read Mr. Bell's report, as follows:

I have completed my analyses of the stomach, intestines, and vomit brought to me. I have searched specially for alkalies, strychnine, arsenic, antimony, and other metallic poisons, and have found all absent.

The Coroner (to the doctor): Having heard the result of the analysis, what, in your opinion, was the cause of death?

Mr. Fergus: In the absence of poison, I consider congestion of the lungs the cause of death.

The Coroner (to the jury): There is no use taking further evidence as to the pills in the face of the analysis. I may say that I took the trouble to call at the pharmacy of Messrs. Thompson & Capper, Piccadilly, Manchester, and stated that their name had been mentioned as supplying these pills, and while there I took the opinion of the principal man in the shop as to whether such a result could occur from these pills, and he said it was absolutely impossible. The pills are very much reduced in strength compared with the tincture. The matter is now ended satisfactorily so far as I can see. The doctor had been previously asked if he could give an opinion as to the cause of death,

and, pills having been mentioned, it was thought better to have an analysis of the stomach and intestines.

The pills, it was stated, had been in the possession of the family for a number of years.

The jury returned a verdict of death from natural causes.

A Chemical Explosion.

An extraordinary explosion occurred at Quarry Bank, Staffs. A man named Worton went into the shop of Messrs. Cox (Limited), chemists, and asked for a mixture of aqua-fortis and tincture of benzoin. He took with him a ginger-beer bottle for the mixture, which Mr. W. J. Cox said was a rather strange order. Worton replied that it was always supplied to him by other chemists without demur, and that he required it for horses' hoofs to prevent them cracking. The mixture was supplied and the bottle was placed on the counter, when it exploded with a loud report. Some of the acid went into Mr. Cox's face, and he had a cut on the hand. Worton was even more badly injured. He was cut on the nose and both hands by the glass from the broken bottle. A girl who was in the shop at the time was struck on the arm with a piece of the broken bottle, and an artery was severed.

Morphine Mania.

At an inquest held at Westminster on September 26, concerning the death of George Alexander Davis, who was found dead in bed at the Hôtel Métropole, the widow stated that deceased, who was a rancher in Kansas, had been addicted to taking morphine. Further evidence showed that Davis had committed suicide by cutting the veins and main artery of the arm with a razor and a pair of scissors. The Deputy-Coroner (Mr. Wellington) read a number of letters left by Davis, the first of which (written on September 23) was to the following effect :

Since Sunday, four o'clock p.m., I have injected 360 grains of morphine into my body, but the only effect it had was to make me a little drowsy and a little nauseated. Have also drunk a bottle of laudanum and injected about 1 oz. of 10-per-cent. solution of cocaine, and previous to that time daily 3 grains of morphia hypodermically; but it simply would not kill me, no matter what the size of the dose. This is true, so help me God. It was impossible to accomplish my purpose, and I could not keep it up any longer.

Deceased had suffered from tuberculosis and heart-trouble. The jury returned a verdict of *felo de se*.

The Week's Poisonings.

Twelve deaths from poisons are reported since our last issue, four being misadventures. These were due to accidental overdoses of laudanum (at Keighley and at Liverpool), of chlorodyne (at Southsea), and spirit of salt being taken in mistake for whisky. The laudanum-victims were Joseph Campbell, of Wavertree, and Samuel Sutcliffe, of Lawkholme; while the chlorodyne was taken by Mrs. Ellen Aitken, an habitual chlorodyne-drinker. Spirit of salt was taken in error by Peter Christiansen, of Sydneyham, and with suicidal intent by Edward Chippendale at York. Two carbolic-acid suicides are recorded: William Edmund Boyce, a gardener at Muswell Hill, was one victim, and Charles Reinhaim, of Chelsea, was the other. Mrs. Charlotte Corbett, wife of a Tottenham dairyman, poisoned herself with oxalic acid, and so did Mary Gorham at Battersea. Rat-poison was taken with fatal results by Minnie Ball (30), of Keynsham, and by Annie Morrison, of Folkestone. The suicide of Mr. Hipkins, of Coseley, is recorded elsewhere. H. S. Carpenter (54), a retired analytical chemist, on August 31, attempted suicide by swallowing a large quantity of chloral. He promised never to take anything to harm him again, but on September 27 he poisoned himself by inhaling coal-gas.

Irish News.

Local newspapers containing marked items of news interesting to the Trade are always welcomed by the Editor.

Poison instead of Whisky.

A woman, named Letitia Mitchell, of Cudlaff, near Londonderry, on September 27 drank carbolic acid in mistake for whisky, and died in great agony. A coroner's jury returned a verdict of death by misadventure.

Contractors Appointed.

The Apothecaries' Hall, Dublin, have been appointed contractors for the supply of medicines to the Monaghan Lunatic Asylum.

Personal.

Mr. John Burnett, pharmaceutical chemist, of the Apothecaries' Hall of Ireland, is opening business on his own account at Kingstown, co. Dublin.

Mr. C. F. Dooley, pharmaceutical chemist, has been appointed apothecary to the Sligo Board of Guardians during the month's holiday of Mr. Denning.

Professor Tichborne has been re-appointed analyst to the Kells Board of Guardians at a salary of 10*l.*, with an extra of 3*s.* 6*d.* for each sample analysed over and above 50 for the year.

Inferior Cod-liver Oil.

Professor Tichborne analyst to the Dundalk Union, reports that the sample of cod-liver oil sent him by the Guardians was of a very inferior quality, the colour being objectionable and the smell rancid. It was decided to ask the contractor for an explanation and request him to replace the drug by a proper supply.

Better Storage Wanted.

Dr. Clibborn, medical inspector of the L.G.B., has written to the Armagh Guardians calling attention to the fact that some time ago the Blackwatertown Dispensary had been burnt down, and had not been restored, and that at present some of the drugs were kept in a pantry which had no lock, and some in the kitchen, which was a most dangerous and unsuitable arrangement. He thought the Guardians should without delay provide a suitable dispensary for Blackwatertown. The report was referred to a committee for consideration and report.

Quality Vindicated.

At the last meeting of the Newtownards (co. Down) Board of Guardians, the Clerk read a letter from Messrs. John Clarke & Co. (Limited), with reference to the recent unfavourable analysis of their drugs supplied to the Union, stating that they had sent samples of the condemned drugs to Somerset House for analysis, but the Secretary of Inland Revenue had written them that he could not permit Somerset House to analyse the samples. They therefore instructed Somerset House to send the samples to Mr. Blake, whose report they now enclosed, from which it could be seen that the drugs were up to the British Pharmacopœia standard. The letter and report were ordered to be inserted in the minutes.

A Highly-coloured Report.

At the weekly meeting at Dublin, on September 22, of the Irish Cattle-traders' Association much satisfaction was expressed with the report issued by the Sheep-dipping Committee recommending that dipping be made compulsory, and condemning the prosecutions at Ballinasloe, which had the effect of making dipping less general. No doubt could exist, said the report of the Association committee, that every possible facility for sale should be given, so as to encourage the use of sheep-dip; but the recent policy of interested persons has placed difficulties in the way of procuring the dips even by those anxious to obtain them. The committee held strongly the view that the general public weal has been jeopardised in the interests of a few chemists in the West of Ireland, and the Secretary was directed to visit Ballinasloe for the purpose of organising public opinion on the question.

Scotch News.

Local newspapers containing marked items of news interesting to the Trade are always welcomed by the Editor.

A "Lemco" Tug.

The steel screw tug named *Roca*, which has been built in Paisley to the order of Liebig's Extract of Meat Company (Limited), is at present lying in the Albert Harbour, Greenock.

Lectures on Pharmacutics.

The Heriot-Watt College, Edinburgh, announces a course of lectures on pharmaceutical materia medica by Mr. William Duncan, Ph.C., F.C.S., to be delivered on Wednesday evenings at 8.30, commencing October 5. The

course will cover the requirements for the Minor examination, and the lectures will be illustrated by typical specimens of drugs. The fee is 5s.

Threatening the Druggist.

Before Sheriff Begg, at Aberdeen, on September 23, a labourer, named Park, was sent to prison for forty days for committing a breach of the peace in the shop of Mr. John Park, chemist and druggist, *On* Deer, by using violent language towards Mr. Park, threatening to strike him, and refusing to leave the shop.

Glasgow Notes.

Business is still abnormally dull, but the limits of cutting seem to have been reached, as even the arch-cutters show an upward tendency.

The photographic season has been in advance of last year as regards the turnover of plates and papers, but cameras have proved dead stock.

The will of the late Mr. Alexander Kinnimont, pharmaceutical chemist, Glasgow, who died on January 28, 1899, shows personal estate valued at 9,436*l.* 19*s.* 6*d.*, of which 2,798*l.* 13*s.* 7*d.* is in England and 1,052*l.* 16*s.* abroad.

Both local Associations are bestirring themselves in preparation for the winter session. The Trade Association is likely to undergo revival, and the Pharmaceutical Association is arranging a series of interesting meetings, on the lines of last year's successes.

The employés of Mr. James Taylor, wholesale druggist, Glasgow, had a picnic to Lanark and the Falls of Clyde on the Glasgow autumn holiday, September 26. Brilliant weather favoured the outing, and everything conducted to a most enjoyable holiday. After sports the party were photographed. An excellent dinner and tea were served in the Caledonian Hotel.

Ether-drinking in Lanarkshire.

The ether-drinking bogey has reappeared. It is now announced that the result of the Chief Constable's investigation is to show that there is a considerable amount of ether-drinking, especially among Polish miners in Lanarkshire. It is said that the Magistrates will recommend that ether should be scheduled as a poison. Our correspondent, who made special inquiries at the time the so-called investigation was opened, now reaffirms the conclusion which he then formed—viz., that the newspaper statements about ether-drinking and the complicity of chemists in the traffic are grossly exaggerated. The habit was once prevalent in certain slum districts, but it is now comparatively unknown, although methylated-spirit tipping is still fairly common. Needless to say, the vendors of both intoxicants are not, and never were, chemists. The "Evening News" of Tuesday dealt temperately with the matter and said :

General inquiries made among officials in the city give every confirmation of the report that the drinking custom is confined to an almost infinitesimal percentage of the population. The practice is only discovered among the very lowest grades of citizens, and even there this form of tipping has, as a general rule, not become chronic.

The "News" then refers to the origin of the habit as stated in the *C. & D.* some time ago, and says :

While it is a fact that the spirit can be obtained in quantities from chemists, the opinion has been given that few qualified dispensers will readily sell the fluid without first satisfying themselves as to the purpose for which it is to be used. The liquid can, however, be obtained in the city, and as with other intoxicants the persons with a craving for the spirit will discover a source through which his desire may be satisfied.

At Glasgow Town Council meeting on September 28 the following minute of the Magistrates' Committee was confirmed :

Under reference to (1) Minute of date 7th August, 1902, when the Chief Constable having submitted a Report on ether drinking in the City, explaining that, having had enquiry made at a large number of wholesale and retail chemists and other persons throughout the City, he was satisfied that a considerable quantity of ether is purchased from a limited number of chemists for drinking in certain low-class localities, that the sales are principally on Sundays, and that the ether drinkers do not appear to be numerically a large class, it was remitted to the Parliamentary Bills Committee to take all necessary steps for having ether included in the scheduled poisons by an Order

in Council; and (2) Minute of the Parliamentary Bills Committee of date 1st October, 1902, when the foregoing Minute of this Committee having been considered, it was agreed that consideration of the subject-matter thereof be continued, the Clerk read a letter, of date 30th ultimo, from the Chief Constable, reporting that he had now learned that large quantities of ether are purchased in the City for distribution by retail amongst the Polish miners of Lanarkshire, and that to check the spread of the ether-drinking habit he would again suggest the advisability of having ether scheduled as a poison; and explaining that ether is sold at 5*s.* per half-gallon, and that, when diluted with water, it is sold at a profit of from 4*l.* to 5*l.* per half-gallon. The Committee, having resumed consideration of the subject-matter, resolved that the Clerk be instructed to forthwith communicate with the Secretary for Scotland, with the request that he take steps for having ether included in the scheduled poisons by an Order in Council.

French News.

(From our Paris Correspondent.)

THE PARIS MUSEUM OF NATURAL HISTORY has been authorised to accept a legacy left by M. Durand consisting of a collection of herbs and a botanical library, a sum of 5,000*f.* (20*000*f.**) to pay the cost of installing the collection, and 50,000*f.* (2,000*f.*) to be invested in French 3 per cent. Rente for the purpose of providing an annual revenue for maintaining the botanical collection and purchasing books on botany.

THE INSPECTION OF PHARMACIES IN FRANCE takes the form of an informal call from one or two professors, but evidently "they order these things better" in Belgium, if one may judge from a certain glass case in the Exposition of Hygiene recently opened at the Grand Palais des Champs-Elysées. The "trousse" in question is a neat brief-bag of crocodile leather bearing in gilt letters the inscription "Inspecteur de Pharmacie," and its contents comprise an extensive selection of reagents, hydrometers, volumetric apparatus, etc. The whole makes an interesting exhibit, and is completed by a number of biennial reports of the inspectors.

COMPOSITION OF ADRENALIN.—In a paper to the Paris Academy of Sciences M. G. Bertrand states that he has endeavoured to find the true formula of adrenalin. His object was to discover the cause of the discrepancies in physiological action, which *a priori* might be attributed to a want of purity in the products submitted for experiment. [NOTE.—As the French Courts permit anything to be sold as adrenalin it is obvious that M. Bertrand's remarks do not apply solely to what the rest of the world knows as "adrenalin"—viz., Messrs. Parke, Davis & Co.'s product.—EDITOR.] He prepared 125 grams of adrenalin from the suprarenal capsules of nearly four thousand horses. The product showed a complete uniformity of physiological and chemical properties, the formula agreeing with that given by Aldrich.

FOR BETTER FOOD.—The Scientific Society of Alimentary Hygiene and Rational Human Food has been "declared of public utility" by the French Government, and can be consulted by the authorities in case of adulteration, etc. This new French Society was organised in 1903 after the Eleventh International Hygienic Congress at Brussels. Among its sixty members, fifteen honorary members, twenty associates (French or foreign), and 100 correspondents are MM. Berthelot, Armand Gautier, A. Haller, Dr. Roux, Gariel, Riche, Villejean, Bordas, C. Girard, and Professors Villiers and H. Gautier, of the Paris Superior School of Pharmacy. Dr. Henri de Rothschild, one of the Hon. Secretaries, has already commenced a course of practical lectures in dairy-work, which forms the first of a series of classes on hygiene as applied to alimentary technology.

QUALIFIED PARTNERS ALL.—In these days of company partnership it is interesting to recall the fact that no partnership is legal in France for the sale of pharmaceutical preparations or specialities, whether for a wholesale or retail trade, unless all the partners possess the diploma of pharmacien, without which the law says "none may prepare, sell, or distribute any medicament." I have before me the text of a judgment given on this particular point. Three

men formed a partnership for fifteen years for the purpose of selling certain pharmaceutical specialities under the name of the "Iron Cross." Within eighteen months they disagreed, and, as they were all unqualified men, an appeal to justice quickly caused the partnership to be dissolved, and a liquidator was named to wind up the estate and distribute the assets among the partners. In this particular case, as in many others, if the parties interested had not fallen out they might have gone on for years transacting their business on the irregular basis on which they started.

FREETHOUGHT AND CHEMISTRY.—The prominent part that M. Berthelot, the famous chemist, thought himself justified in taking in connection with the Congress of Free-thought held in Rome last week could not be passed in Paris without comment. As he was unable to journey to the Eternal City himself, he sent a letter to be read to the Congress, in which he said that its meeting under the shadow of the Vatican is a sign of the times, for Rome has been the centre of the oppression of science for more than 1,500 years. Much more to the same effect was said by M. Berthelot, and a good deal of importance is attached to it, as since the death of Pasteur he stands prominent as the *doyen* of scientific Paris and France. Among the younger generation of scientists he has a considerable following, while among the students of the Latin Quarter his disciples are numerous. M. Berthelot's letter has, however, not given universal satisfaction—for instance, M. Edouard Drumont, in "La Libre Parole," asks what reason he can have for wanting to take from poor humanity all the motives of consolation and all reasons for hope.

Australasian News.

Communicated by the Australian Staff of "The Chemist and Druggist."

The fullest information regarding the Australasian drug-trade and pharmacy is given in "The Chemist and Druggist of Australasia," a journal established by the proprietors of this journal, and published in Melbourne, Vic. Copies of the monthly issue can be obtained at 6d. each, post free, from the office of "The Chemist and Druggist," 42 Cannon Street, London, E.C.

Note.—"The Chemist and Druggist" is regularly supplied by order to all the members of the following, amongst other, societies:

Central Pharmaceutical Association, N.Z.
Canterbury (N.Z.) Pharmaceutical Association.
Otago Pharmaceutical Association, N.Z.
Pharmaceutical Society of New South Wales.
Pharmaceutical Society of Queensland.
Pharmaceutical Society of South Australia.
Pharmaceutical Society of Tasmania.
Pharmaceutical Society of Western Australia.

Customs Decisions.

THE COMMONWEALTH TARIFF DECISIONS following were recently gazetted:

Batteries, known as Electro-Medical 12½ per cent.
Söemnoforme Free, as anaesthetics.
Sulfo Ichthyolicum Free
Sulphuret of Antimony 1s. per ewt.

New South Wales.

THE PHARMACEUTICAL SOCIETY OF NEW SOUTH WALES.—The August monthly meeting of the Council was devoted almost exclusively to the consideration of a proposition from the University to establish a course of practical pharmacy and institute a diploma of pharmacy for those who have passed the prescribed Entrance examination, passed through the prescribed curriculum at the University, and served as apprentices for the time prescribed by the Act, the condition imposed being that the Pharmacy Board should adopt the Matriculation examination as the Entrance instead of the present Preliminary, which is not of sufficiently good standard. The Council unanimously decided to accept the proposition and pass it on to the Pharmacy Board with a strong recommendation that it should be adopted.

New Zealand.

THE PHARMACY-BOARD election resulted on July 22 in the return of Mr. George Bagley with thirty-eight votes, Mr. William George Broad obtaining thirty votes. Of the eighty votes cast no fewer than twelve were informal. The election took place to fill the vacancy on the Pharmacy Board caused by the resignation of Mr. Gattenby.

THE PHARMACY BOARD OF NEW ZEALAND under the Act of 1890 consists of four members for the Wellington district and two each for the districts of Auckland, Canterbury, and Otago. As these other districts are so far apart and involve so much expense and time in travelling, the whole of the Board does not meet every month, but the four residents in Wellington conduct routine business, reserving questions of policy for a periodical conference of the whole Board. Such a conference took place in Wellington on August 9, 10, and 11. After dealing with routine matters, the question of the standard of examinations was brought up and referred to a committee, which reported in detail, recommending a strong effort to make the examinations in pharmacy and chemistry more practical. An attempt is to be made to arrange with the New Zealand University to conduct examinations in chemistry at its laboratories in the four centres, and so take chemistry out of the Board's hands entirely. The examination is to be in two parts—a practical examination in elementary chemistry within limits to be selected by the Board from the text-books of Jago, Kemshead, and Thorpe, and a written paper on pharmaceutical chemistry selected from Atfield's "Chemistry" and Cripps's "Pharmacy." Professor Kirk is to be asked to review the syllabus of botany and offer suggestions as to the best means of making the subject more practical and in accord with the educational facilities at present available to candidates. A discussion took place on the question of reciprocity with Cape Colony, but it was decided that the Board could not under the present Act make arrangements with the Cape. In regard to reciprocity with the Australian States, it was decided to take a referendum of the registered chemists of the Colony on the following questions: Shall reciprocity be established with the Australian Colonies on the basis (1) that certificates be exchanged on the whole register basis, (2) that certificates be exchanged on the basis of examination; (3) that reciprocity be not entered into at present? The question of the amendment of the Sale of Poisons Act was next considered. The existing Act provides for the registration of anyone of good character as a seller of poisons, unlike the Acts of the Australian Colonies, which provide that such licences shall not be granted to any unregistered person residing within four miles of the nearest registered pharmacist. An amended Poisons Bill is under consideration by the Government, and it was resolved to ask that the administration be placed in the hands of the Pharmacy Board, provided that certain approved clauses in the Victorian Act are accepted; that an annual registration fee of 10s. be charged to all sellers of poison, to be collected by the police, half to be paid to the Board and half to the Government; further, that as chemists already pay an annual fee of 10s. and are registered under the Pharmacy Act, they should be exempt from registration and the payment of any fee under the Poisons Act.

Queensland.

THE PHARMACEUTICAL SOCIETY OF QUEENSLAND at its July meeting co-opted Mr. T. D. Rutter to the vacancy on the Council caused by the resignation of one of their oldest members, Mr. J. H. FitzGibbon. Two new members were elected and another nominated. Arrangements were made for the annual reunion. The Council are making further inquiries with reference to the case where a woman was poisoned by taking Cooper's sheep-dip in mistake for sulphur.

Tasmania.

PHARMACEUTICAL SOCIETY OF TASMANIA.—At the meeting on August 2 correspondence was read between the Registrar of the Society and a firm of grocers in Launceston, the capital of the northern part of the Island. The letters warned the grocers that they were breaking the Act in selling citrate of magnesia, fruit-salt, "Lyfa" salt, extract of malt, extract of malt and cod-liver oil, glycerin, vaseline, petroleum jelly, lime-water, senna-leaves, Tricopherous, seidlitz powders, fluid magnesia, and camphor; that these could only be legally retailed in Tasmania by properly qualified chemists and druggists, but that there was nothing to prevent their sale by wholesale; and that they must withdraw from sale at once extract of malt and cod-liver oil, lime-water, fluid magnesia, and camphor, or a prosecution must ensue.

South African News.

(From our own Correspondents.)

Note.—THE CHEMIST AND DRUGGIST is regularly supplied by order to all the members of all the Pharmaceutical Societies in British South Africa, viz. :

SOUTH AFRICAN PHARMACEUTICAL ASSOCIATION.
PHARMACEUTICAL SOCIETY OF CAPE COLONY.
NATAL PHARMACEUTICAL SOCIETY.
TRANSVAAL PHARMACEUTICAL SOCIETY.
RHODESIA PHARMACEUTICAL SOCIETY.
NORTHERN DISTRICT CHEMISTS' ASSOCIATION.
PHARMACEUTICAL SOCIETY OF ORANGE RIVER COLONY.

Cape Colony.

REDUCING SALARIES.—It is generally reported at Cape Town that one of the wholesale firms has decided to reduce all salaries 10 per cent. in preference to discharging hands. Unless business gets better it is expected that other firms may follow suit.

RECOVERED.—Mr. J. Astell Wilson, representative in South Africa of Messrs. Lynch & Co. (Limited), London, and of Messrs. C. J. Hewlett & Son, London, has been down with pneumonia, but had sufficiently recovered when the *Armadale Castle* sailed to proceed to Johannesburg to continue his journey.

IMPORTATION OF MEDICINAL SPIRITS.—The "Cape of Good Hope Government Gazette" for August 19 contains the full text of the Customs notice issued by the Cape Controller of Customs on August 9, 1904, respecting the importation of medicinal spirits and essences or perfumed spirits into the Colony, to which reference was made in our issue of September 17, page 495.

FREIGHT QUOTATIONS.—United Kingdom to South African ports *via* New York is not the most direct route, of course, but it is considerably cheaper than any other. The following quotations, without classification, were in force for a limited amount of cargo when the last mail left the Cape : To Cape Town and Port Elizabeth, 15s. per ton; East London and Durban, 17s. 6d. per ton; Lourenço Marques, 22s. 6d. per ton. The Prince Line, who have agents in London, quoted these figures.

TRADE-MARKS.—Messrs. C. J. Van Houten & Zoon, Weesp, Holland, have applied to the Registrar of Trade-marks, Cape Colony, to register the words "Van Houten" together with a picture of a bird with spread wings. Applications have also been made for the registration of the word "MyneL" by Julius Meine, Vienna, covering goods in Class 42, Cape Colony; and for a pictorial label covering mineral and aërated waters in the Cape Colony, by Messrs. Grattan & Co. (Limited), Belfast, Ireland.

MR. JOHN C. HEWLETT.—F.C.S., of Messrs. C. J. Hewlett & Son, London, was in Cape Town when the last mail left. In the course of conversation with our correspondent he expressed himself as greatly impressed with the strides that have been made in South Africa since he visited the country some five years ago. Naturally Mr. Hewlett is interested in the spirit-duty question, and was consulted about it in Johannesburg. Mr. Hewlett has accomplished some rapid travel since his arrival a few weeks back, and, to use his own words, likes nothing better than the voyage out and a run across South Africa.

Natal.

THE TINCTURE QUESTION.—Latest advices on this subject are that nothing further will be done by Lord Milner without the co-operation of the representatives of the drug-trade in the Transvaal and Natal. It is understood that the whole matter will be shortly gone into, and the opinions of well-known chemists invited. The settlement of this question will take some time, so that there is no likelihood of any duty being imposed this year.

AUGUST TRADE-RETURNS.—There is a slight improvement visible in the figures for August as compared with July, although there is a great shortfall as compared with the corresponding month of last year. The value of the imports and exports was more satisfactory in each case, and the Customs returns greater, although very much below the receipts of last year, the shortfall, after deducting the amount due to other Colonies under the Convention, being about 50,000*l.*

A SEQUESTRATION SOUGHT.—At the Supreme Court, Durban, on August 19, George Andrew, chemist, of Durban, failed to appear in answer to a summons calling upon him to show cause why his estate should not be declared sequestrated. It was alleged in the summons that Andrew sold his business on April 2 last to J. H. Reid on condition that Reid was to take over a bond of 750*l.* over the business; that there would be payment of 200*l.* in cash (which had been duly paid), and payment of 400*l.* in twenty promissory notes for 20*l.* each, payable monthly. A sum of 200*l.* had not been paid. In a petition signed by various creditors, it was stated that Andrew was indebted to them in the aggregate of 109*l.* 8*s.* 8*d.* In January last he made an arrangement to pay the debts off by paying 12*l.* 10*s.* a week into the hands of a solicitor on their behalf. Three such payments were made, but on May 2 Andrew left the Colony and still remained out of the Colony, with the object of defeating his creditors. In the opinion of the Court the summons did not sufficiently set out the acts of insolvency, and a postponement was granted to enable the summons to be amended.

A CHEMIST-LEGISLATOR.—A series of "thumb-nail sketches" of legislators in the Natal House of Assembly is appearing in the "Natal Mercury." No. 34 of the series is Mr. J. E. Marchant, the only chemist in the House. Mr. Marchant is the Whip of the Government party, and, according to the "sketcher,"

he has cultivated that furtive habit of moving about the House, which seems to be one of the duties of party Whips. He is mild and unobtrusive of temperament, and it is only the exigencies of party warfare which bring him into prominence. At the same time, he can, upon occasion, make a sensible, well-worded speech, and, if the same is somewhat parochial in tone and subject, the reason for this is probably his natural reluctance to prejudice in any way the utterances of those for whom he acts as *aid-de-camp*. He is a man in the prime of life. Though his abundant grey hair lends an appearance of age, his youthful figure and still sprightly energy belie this. He wears a slight, drooping moustache, and has a rather long, serious visage, which rarely indulges in the relief of a smile. He dresses quietly and neatly, and there is nothing frivolous about his appearance. He takes himself and his duties very seriously, and is a precise, respectable legislator, whose usefulness is more apparent in matters of detail than in larger affairs of State and Imperial policy.

Our correspondent, who knows the subject of the article well, says the sketch is a faithful presentment of Mr. Marchant's characteristics.

Orange River Colony.

AMONG ARTICLES of interest to the drug-trade imported into the Colony during the year ending June 30, 1904, were the following, the figures in parentheses referring to those of 1902-3. Acetic acid, 140*l.* (132*l.*); drugs and chemicals, 23,095*l.* (22,342*l.*); extracts and essences, 2,036*l.* (2,197*l.*); ginger, green and dry, 53*l.* (57*l.*); essential and perfumed oils, 170*l.* (91*l.*); all other descriptions of oils, 17,805*l.* (10,764*l.*); paints, colours, turpentine, and varnish, 14,879*l.* (8,467*l.*); perfumery, cosmetics, powders, and soap for toilet use, 4,164*l.* (3,907*l.*); common soap, 19,970*l.* (15,288*l.*); imported spirits, 38,212*l.* (48,517*l.*); and spirits manufactured in Cape Colony, 14,900*l.* (13,582*l.*)

CAPE PHARMACY BOARD.

A GENERAL MEETING of the Board was held at Cape Town on August 11. There were present Messrs. A. Walsh (in the chair), J. Alfred Mathew, G. Darroll, J. McJannet, and the Secretary (Mr. R. J. Gill). The report of the Executive Committee and Secretary was read and adopted. Four applications for registration were submitted and accepted. Further information supplied by the Colonial Secretary's Department in regard to a case of alleged illegal practising was laid before the Board. It was resolved to refer the case to the Attorney-General for his ruling. The Secretary then laid on the table a letter from the Colonial Under-Secretary enclosing a circular issued to all Civil Commissioners, etc., requiring the Distributor of Stamps, before issuing a licence to open a chemist's shop, to call for the production of the certificate or licence of the person to be placed in *bonâ-fide* charge of such shop. A motion to place cannabis indica or Indian hemp in Division 1, Schedule III., of Act 7 of 1899 was postponed for further consideration.

Colonial and Foreign News.

ITALIAN QUININE.—The Italian Government are now making quinine dihydrochloride as well as hydrochloride, sulphate, and disulphate. The State sales of quinine amounted to 8,000 kilos. in 1903, with a net profit of 180,000 lire, against 3,000 kilos. in 1902.

IS THE SULTAN AFRAID?—A recent Turkish order forbids the importation of potassium cyanide and sodium cacodylate. All the stocks of these preparations in the hands of pharmacists, druggists, photographers, dyers, goldsmiths, etc., are to be bought up by a specially appointed commission.

NEW RUSSIAN PHARMACEUTICAL COMPANY.—Julius Lemme & Co., of Rostov, on the Don, has been converted into a joint-stock company called the "Don Joint-stock Pharmaceutical Goods Trading Company," with a capital of 20,000*l.* The business includes pharmacy, chemicals, drugs, and proprietary articles.

VACCINE AND SERUMS IN RUSSIA.—The "Pharmatsevitcheski Viestnik" says the Bacteriological Institute of the Moscow University in 1903 issued 39,057 tubes of inoculatory substances. A notable item was antidyserent serum, of which 270 tubes were issued, this being the first antidyserent serum prepared in Russia.

RUSSIAN HERBS.—In Dubeiskom, and especially round about Lubnen, says the "Svet," the business of gathering medicinal roots and herbs is developing rapidly, and these are principally sent on to Leipzig and Paris. The annual exports now amount to about ten thousand poods. Women and children are chiefly occupied in collecting the drugs.

OLIVE-TREES IN SPAIN.—According to official statistics 3,294,646 acres were devoted to the cultivation of olive-trees in Spain in 1903, against an average of 2,867,005 acres for the last ten years. In ten years there has been an increase of 518,919 acres in the land used for the production of the olive. These 3,294,646 acres were divided among thirty-three provinces.

THE NEW RUSSIAN PHARMACEUTICAL TARIFF. which is to rule the sale of simple and compound medicines, has been examined by the Medical Department of the Minister of the Interior, and came into force on September 14. On some medicines there is a reduction of 10 per cent. as compared with previous prices. The tariff on medicines dispensed has been left almost unchanged.

WORKING-HOURS IN RUSSIAN PHARMACIES.—On September 13, in the Vosnesenskoi Pharmacy in St. Petersburg, a double shift of the staff was inaugurated, so that no one of the assistants in the establishment has to work more than eight hours a day. Unfortunately, says the "Novosti," such measures seem hard to introduce in the pharmacies of the capital. Of the ninety pharmacies in the city only six have the double shift, while in the others the assistants work fourteen hours a day.

PHOSPHATE AND NITRATE CONCESSION.—The Egyptian Government has granted a concession to two Englishmen giving them full and exclusive right at all times during the term of thirty years from March 1, 1904, to search for and carry away all and every sort of phosphate and nitrate deposits in and under any or every part of the pieces of land comprised within 50 feddans on the north-east side and 50 feddans on the south-east side of Jebel el Qurn, 200 feddans at Jebel Sebaia, and 200 feddans at Jebel Qeiba, making a total of 500 feddans.

THE CONFERENCE of German scientists and doctors was held at Breslau from September 18 to 24. The Pharmacy and Pharmacology Section was opened by Professor Dr. Poleck in the lecture-room of the Pharmaceutical Institute of the University, of which he was for many years director—Dr. Gadamer, his successor, being in the chair. Among the communications were one by Professor H. Thoms, of Berlin, on oil of matico and matico camphor, and on German opium, and one by Professor E. Schmidt, of Marburg, on the influence of the side chain on the physiological action of cholin, neurin, and allied combinations.

RUSSIAN PHARMACY.—The "Pharmatsevitcheski Viestnik" draws a terrible picture of the life of the pharmacists of Mohilev, Russia. As a sample it selects a large pharmacy where about two hundred prescriptions are made

up every day, and a good retail business also done. The proprietor employs only four apprentices and two assistants, who are all worked to exhaustion. The assistants get 3*l.* 10*s.* per month, and the apprentices nothing the first two years, then 16*s.* to 20*s.* per month—in each case indoors. The living accommodation is said to be horrible.—The same journal complains about drug-adulteration, and states that not long ago 40 poods of cinchonine arrived on the Moscow market, and the only purpose for which it was imported was to mix with quinine.—The "Novoe Vremya" states that although the Infirmary and Sanitary Commission decided against the installation of a municipal pharmacy at St. Petersburg to supply the infirmaries with medicines and instruments, the Town Council insists on having it, and will discuss the matter at a special sitting.

Duty-free Alcohol.

AT a meeting of the Birmingham Chamber of Commerce last week the General Purposes Committee reported that they had addressed the following questions to manufacturers and users of spirit for industrial purposes :

1. Have you ever made application under Section 8 of the Finance Act, 1902, for the use of spirit duty free, and, if so, have you been able to obtain the necessary authorisation without undue restrictions being imposed?
2. What particular processes in your industry would be assisted by the use of spirit duty free?
3. In what manner and to what extent would the use of spirit duty free assist your industry?
4. Would the use of spirit duty free assist you in competition with the manufacturers of other countries?
5. What effect generally would duty-free spirit have on the prices of commodities in connection with your business?
6. What advantages in your industry would a pure spirit possess over a methylated spirit?
7. Would there, in your opinion, be any insuperable difficulty in securing that pure spirit used in your industry should not be consumed as a potable drink?
8. Would it be possible to render pure spirit impotable without lowering its industrial value?
9. Can you supply any other information which would assist the Council in preparing evidence in favour of further facilities being granted for the use of spirit duty free.

The object of the committee is to elicit information to present to the Government Committee of Inquiry.

Sir Neville Lubbock, Chairman of the West India Committee, and the Secretary have written a letter about the terms of the reference to the Committee. It may be remembered it was at one time suggested that a colonial representative should be on the Committee, and Sir Neville's name was mentioned. Sir Neville and his colleagues now say :

The terms of reference are such as to preclude the interests of the Colonies being considered.

What is the cause of this neglect of the Colonies? It may seem an ugly thing to say, but the distiller in this country commands votes and the Colonies do not, and this may be the reason why nothing must be done to offend the home distillers, and why they are afforded a protection of no less than 4*d.* per gal., or nearly 50 per cent., against British distillers in the Colonies. The surtax of 4*d.* per gal. imposed on colonial spirits is a genuine grievance which demands redress.

Methylated spirit imported from the Colonies to the United Kingdom is subject to a duty of 1*l.* 5*d.* per gal., while spirit methylated in this country is duty free. British colonial spirit imported into the United Kingdom has to pay a duty of 4*d.* a gal., while spirit manufactured in this country for methylation is duty free. What possible justification can there be for this state of affairs? Excise restrictions are imposed to protect the revenue, neither more nor less, and, inasmuch as those in the West Indian Colonies are under the control of the Home Government, the West Indies may fairly claim to be put on the same footing with regard to the surtax as the distiller in this country. Is it too late to hope that a colonial representative may be added to the Committee, and that the Colonies may be included in the terms of reference?

In spite of the vein of sophistry through this letter, and the inaccuracy regarding the differential duty, we dare say the Committee will be able to satisfy the Colonies, and if they are able to avoid discussing the question of colonial and foreign spirit they will have some difficulty in giving the Chancellor any advice.

London Chemists' Association.

A MEETING of the General Purposes Committee of this Association was held at St. Bride's Institute, Ludgate Circus, E.C., on September 28, Mr. John C. Umney in the chair. Fifteen members were present.

LETTERS.

The Hon. Secretary (Mr. R. B. Betty) read the reply received from the Local Government Board to a letter from the Association calling attention to the case of Mr. S. Brook, chemist, of Grayshott Road, S.W. (see *C. & D.*, March 19, page 466, April 16, page 603, and April 30, page 719). The L.G.B. letter regretted the Board could do nothing in the matter, and a record was ordered to be placed on the minutes of the Association that an unsatisfactory reply had been received, and that it had been communicated to Mr. Brook.

Mr. Glyn-Jones wrote thanking the Association for their congratulations on his success in qualifying as a barrister.

ELECTION OF OFFICERS.

The following officers were (subject to their acceptance of office) unanimously re-elected for the ensuing session: President, Mr. T. H. W. Idris; Vice-President, Mr. W. S. Glyn-Jones; and Treasurer, Mr. G. P. Pond. Mr. Albert Cooper having written stating his inability to accept again the office of Chairman of Committee, Mr. F. Truman was unanimously appointed to that office, with Mr. John C. Umney as Vice-Chairman.

THE SECRETARSHIP.

Mr. Betty intimated his resignation as Hon. Secretary. His principal reason for that step, he said, was for the good of the Association. Since his defeat for election to the Pharmaceutical Council he had lost a certain amount of prestige. (No, no.) No new member had joined the Association since his defeat, some had left the Association, and the money had been coming in very slowly. (Cries of "Nothing to do with it.") Moreover, there would probably be another public dinner in connection with the Association, and he was so placed that he would not be able to give the details the attention he gave on the last occasion. He thought it would be better for the Association if his name were removed from the secretaryship. (Nonsense!) They could start afresh, with a clean page, so to speak. (Dissent.)

Mr. Pond hoped Mr. Betty would reconsider his decision.

Mr. P. H. Burton, Mr. Feaver Clarke, the Chairman, and others made strong appeals to Mr. Betty in the same strain, but Mr. Betty said he felt it impossible to accept the position again after standing condemned by the country.

In the course of further remarks Mr. Willson said Mr. Betty had a fair grievance, as he had not been fully supported by members of the Association, while North Kent and Thames Valley had run opposition members.

Mr. Feaver Clarke emphatically repudiated any personal feeling against Mr. Betty on the part of members of the North Kent Association; and Mr. J. Palmer, with some heat, characterised the remarks of Mr. Willson regarding the action of the Thames Valley Association as most unwarranted.

Ultimately it was proposed by Mr. Burton and seconded by Mr. Pickering that the question of the secretaryship be deferred until the next meeting of the committee. Mr. Betty consenting, this was unanimously agreed to, and Mr. Betty was thanked for his past services.

THE TITLES QUESTION.

The consideration of the resolution presented by Mr. C. E. Pickering at the annual meeting regarding titles was then gone into. Mr. Pickering's resolution, which he again moved, was:

That this meeting of the London Chemists' Association is of opinion that a memorial or petition should be presented to the Privy Council drawing attention to the urgency of legislation for the protection of pharmaceutical titles, and requests the General Purposes Committee to act in the matter.

Mr. Pickering said it was detrimental to pharmacy that unqualified persons should be allowed to have their names displayed on a facia, and thus lead the public to believe they were registered chemists. He did not think it was

clear that such persons had a right to use the titles, and he thought a test-case should be taken to decide the matter finally.

The Chairman said in the face of counsel's opinion to the officers of the Pharmaceutical Society he did not think a test-case was practicable, and in the present critical state of pharmaceutical legislation he was distinctly of opinion that it would be undesirable to approach the Privy Council on the subject.

Mr. Holding, Mr. Burton, Mr. Feaver Clarke, Mr. Palmer, Mr. Campbell, and Mr. Watson-Will upheld the contention of the Chairman as to the unwise of the step proposed by Mr. Pickering. Mr. Watson-Will reminded the meeting that the matter had been fully threshed out at the Federation meeting at Dundee in 1902, when the whole history of the question was ably laid before the country in a paper by Mr. Peter MacEwan, of THE CHEMIST AND DRUGGIST.

Mr. Willson seconded Mr. Pickering's resolution. He thought the question of titles had never been effectively tackled, and there was no use sitting still any longer, as the Pharmaceutical Society did not seem inclined to move.

Mr. Pickering explained that while lobbying Members of Parliament on the Pharmacy Bill he found that most of the members he spoke to were astonished at the anomalous state of pharmacy law. The member for one of the northern counties told him that if the Pharmaceutical Council could not stop the abuses they should draw up a petition for presentation to either the Privy Council or the Home Secretary, and that remark gave him the idea for his resolution.

Mr. Burton moved, as an amendment, that the resolution lie on the table. Mr. Watson-Will seconded, and on the vote being taken the amendment was carried.

MR. POND'S PROPOSALS.

The General Purposes Committee appointed some time ago a sub-committee to consider the propositions of Mr. Pond regarding the consolidation of the Association. The sub-committee decided that the propositions should be printed and circulated among members of the committee for discussion at the next meeting. This was done, and the propositions were now considered *seriatim*. Mr. Pond's primary idea was apparently the extension of the London Chemists' Association into a kind of National Association. However, he agreed to drop the alteration of the title of the Association, and a consideration of his proposed alterations of rules revealed, as Mr. Pentney said, "that his friend Pond had apparently got hold of an old set of rules and suggested alterations such as had already been incorporated in the revised rules." The sum total of the discussion was that full consideration of the "further rules and regulations for the consolidation of the Association" be deferred until a future meeting, and that the proposed alterations be not accepted. In this connection Mr. Watson-Will gave notice of motion to the effect that a copy of the rules of the Association as amended be printed and circulated to every member of the Association, and that every member on his election be provided with a copy.

Higher Technical Education.

The London Chamber of Commerce have been in correspondence with the Board of Education on the question of the provision of higher technical education at cheap rates, and have received an assurance from the Board that both they and the local education authorities are anxious to do all in their power to further the development of higher scientific and technical education. It is pointed out that the Education Act, 1902, considerably widens the powers of local education authorities in that the restrictions of the old Technical Instruction Acts have been repealed. The Board also note that special encouragement is given to institutions organised and equipped so as to provide facilities for higher technical education, and quote the memorandum prefixed to the recently issued regulations. The manufacturers, however, must, it is pointed out, be willing to find posts for trained men at suitable remuneration, and hitherto the assistance that would be expected on that head from the employers has not been forthcoming. The Chamber of Commerce are asked to place definite proposals before the Board for further consideration.

Society of Chemical Industry.

The Trip West.

(From our own Representative.)

PITTSBURG, PA., September 17.

WE left New York on Monday, September 12, for Philadelphia. There is only one way to the Quaker City, but we "industrious chemists" were peculiarly favoured in having a magnificently appointed train with a Pullman observation-car ("as big as a house") and four sleeping-cars from the same workshops, as well as two of the Pennsylvania Railroad's own dining-cars and a few oddments on wheels. The P.R. was the Cook of the occasion, and did things well.

"We shall never forget Philadelphia," said Sir William Ramsay later in the day. Lucky, perhaps, in being the first hosts of the tour, but there were some men on the Local Committee who are noted entertainers. Dr. Samuel P. Sadler, of the Philadelphia College of Pharmacy and the University of Pennsylvania, was the Chairman, and with him were Mr. Howard B. French, Mr. M. N. Kline, and Mr. Geo. D. Rosengarten, well known to pharmacists, besides others. Arriving at Philadelphia we drove to Independence Hall, where the Mayor gave us a welcome, and from there went to the University of Pennsylvania, which was thoroughly inspected, including the medical hall and Harrison laboratory of chemistry. Luncheon was served here. In the afternoon we had a chance of seeing something of the city's industries. Philadelphia boasts of having one-twentieth of the manufactures of the United States. Twenty-four establishments are engaged in chemical-industry. These are capitalised at \$13,400,479, employ 1,917 workmen, pay annual wages of \$1,026,013, use raw material costing \$4,353,716, and produce finished products valued at \$7,810,456. Fifteen establishments are engaged in the preparation of drugs, representing a capital of \$4,513,682, and with an annual product valued at \$3,900,189. The drive took us through Fairmount Park, and we returned to the Country Club, where we were banqueted in royal style. It was then that Sir William Ramsay, in thanking the Local Committee for their hospitality, said, "We shall never forget Philadelphia."

The excursion scheme means that we make the most of the day and as little of the night as we can. I confess to feeling the "rush"—it is too strenuous a journey—but no visitors have ever seen more in less time than we have, or done it so comfortably or under such pleasant guiding. Thus we left the Country Club in time to catch our train close by, where the sleeping-saloon waiters had our sections ready for us to drop into on the stroke of midnight. A sixteen-hours' day we had made it. The journey to Washington takes less than four hours, so we were side-tracked until 7 A.M. on September 13, when members of the Local Committee (consisting of S.C.I. members in Washington and Baltimore) met us at the station. The new Willard Hotel was our headquarters, and Dr. Marcus Benjamin was the Local Secretary. The first thing we did was to see Washington on electric cars, a guide on each describing the points of interest. Luncheon was served at Henrich's brewery, and in the afternoon we had a trolley-ride along the banks of the Potomac River, returning in time for dinner at the New Willard or at the Cosmos Club, of which we were made *pro tem.* members, the ladies having the courtesies of the Washington Club. Later, at Rauscher's (a fashionable restaurant), there was a cake-walk and smoker. I ought to say here that Dr. W. H. Wiley was the Chairman of the Local Committee, and among those who assisted him were several gentlemen who have made their mark in pharmacy, notably Mr. Lyman F. Kebler and Dr. A. R. L. Dohme, Baltimore.

Wednesday morning was reserved for the more imposing sights of this grand city. At the Capitol, the Congressional Library, the White House, the Smithsonian Institution, and the Washington Monument, the chiefs of various Government departments were our guides, and we were particularly fortunate in seeing and hearing many things that do not fall to the lot of ordinary mortals. A trolley-trip to the tomb of Washington in the afternoon was followed in the evening by a vaudeville performance at Chase's

Theatre. We were all charmed by the quiet and courtly atmosphere of Washington.

The next stopping-place was Pittsburg. Our train was timed to leave Washington at 4.30 A.M. on the morning of September 15, and we travelled by way of Harrisburg and Altoona, travelling over the famous horseshoe curve, arriving about 6 P.M. I am writing against time now, as we leave very soon for St. Louis, but I ought to say that we have had a right hearty and homelike welcome in this city of steel, and we are leaving with an infinitely more favourable impression of smoky Pittsburg than we had when we arrived. Nothing could exceed the kindness which the technical chemists on the Local Committee have showered upon us. We began our round of pleasures soon after arrival by visiting the Pittsburg Exposition of local manufacturers, and heard Sousa's band. Yesterday we went by train to East Pittsburg, in order to inspect the works of the Westinghouse Electric and Manufacturing Company, and of Westinghouse Machine Company. These concerns employ 20,000 men and women, compared with 200 when they began in 1886. It was an education in electrical methods to walk through the factory of the first-named company, for there we saw in the making all that goes to harness the mysterious force which we use as motive-power and to illuminate the darkness. I send you with this a finely illustrated description of the electric works which was given to each of the hundred S.C.I. members who visited the place. It will not only give you an idea of the gigantic scale of production, but also show that the company do not overlook the social welfare of their employees. It struck me as an interesting phase of the organisation that it embodies a complete scheme of apprenticeship. The ladies did not go with us to East Pittsburg. The committee (of which Miss Mary Lynne, technical chemist, in practice in Pittsburg is "Chairman") took them for a carriage-drive, entertaining them to luncheon at the Country Club. In the afternoon I visited the world-famed Carnegie Steelworks, and saw ingots of steel weighing 10² tons rolled into 40 feet of steel plate 5 inches thick as easily as a pill-mass. We had a pleasant smoker in the hotel in the evening; and this morning, early, we started to do more of the industries, including the Phoenix Glassworks, the Lake Erie R.R. Works, Heinz's food-products factory (their tomato things are known on the other side), and a coal-mine. The Local Committee (Chairman, Dr. K. F. Stahl, superintendent of the General Chemical Company, of Pennsylvania) is composed of chemists connected with the various local industries, and a few principles, among them Mr. Geo. A. Macbeth, a glass-manufacturer, and Mr. H. K. Porter, a locomotive-manufacturer and a member of Congress. They joined us to-night at dinner in the Hotel Schenley, where we had "Abschiedstrunk." It is but a little return for their unrepayable hospitality, and I am somewhat in doubt as to whether the finished organisation of the three days' visit is not one of the most instructive things on tour.

We arrive at St. Louis to-morrow afternoon. Sir William Ramsay is to deliver an address there to the Congress of Inorganic Chemistry.

S. R. LOUIS, September 19.

Mr. Walter F. Reid, Chairman of the London Section of the Society, and members of the local chemists' committee, received us at the railroad dépôt here yesterday. Mr. Reid and Mr. Helm (late of the Government Laboratories) are here acting as jurors of the chemical section of the Exposition. I subjoin an account of the

INTERNATIONAL CONGRESS

of Arts and Science which is to be held here this week, opening to-day and continuing until September 25.

The S.C.I. tour was arranged to coincide with the Sessions of the Congress, the idea of which has been that the subdivision and multiplication of specialities in science has reached a stage at which investigators and scholars may derive both inspiration and benefit from a general survey of the various fields of learning planned with a view to bringing the scattered sciences into closer mutual relations. The central purpose is the unification of knowledge, and the assemblage of leading representatives of theoretical and applied sciences, selected from the European and American continents, who were given the prescribed task of reviewing

the historical development of their special sciences or of showing their mutual relations and discussing their present problems. The Congress opens on Monday afternoon. On Tuesday an address is to be delivered by the speaker of each of the main divisions of science and its applications: (1) Normative science, (2) Historical science, (3) Physical science, (4) Mental science, (5) Utilitarian sciences, (6) Social regulation, and (7) Social culture.

These are to be followed by two addresses in each of the twenty-four great departments of knowledge. The theme of one address in each case will be the fundamental conceptions and methods, while the other will set forth the progress during the last century. The preceding addresses will be delivered by Americans, making the work of the first two days the contribution of American scholars. On the third day the international work begins. About 128 sectional meetings will be held on the four remaining days of the Congress, at each of which two papers will be read—the theme of the one being suggested by the relations of the special branch treated to other branches; the other being suggested by present problems.

The simultaneous meetings of all the Sections, at 11.15 A.M., 2 P.M., and 4.15 P.M., are so arranged as to enable each hearer to attend eight such meetings if he so desired. In twenty-four departments of science, each subdivided into three to twelve sections, addresses have been prepared by a chairman and at least two leading speakers, making a grand aggregate of no fewer than 400 addresses as the week's work of the Congress, and each of these by a distinguished authority in his particular subject.

In the division of Physical Science the department of physics is embraced in physics of matter, physics of ether, and physics of the electron; while Chemistry is divided into the following sections, with speakers as follows:

DEPARTMENT OF CHEMISTRY.

Chairman, Professor James M. Crafts, Massachusetts Institute of Technology.

Speaker, Professor John U. Nef, University of Chicago.

Section A.—Inorganic Chemistry.

Chairman, Professor John W. Mallet, F.R.S., University of Virginia.

Speakers, Professor Sir William Ramsay, University of London, and Professor Henri Moissan, University of France.

Section B.—Organic Chemistry.

Chairman, Professor Albert B. Prescott, University of Michigan.

Speakers, Professor Rudolf Fittig, University of Strassburg, and Professor Wm. A. Noyes, National Bureau of Standards.

Section C.—Physical Chemistry.

Chairman, Professor Wilder D. Bancroft, Cornell University.

Speakers, Professor J. H. Van't Hoff, University of Berlin, and Professor Arthur A. Noyes, Massachusetts Institute of Technology.

Section D.—Physiological Chemistry.

Chairman, Professor Wilbur O. Atwater, Wesleyan University.

Speakers, Professor Albrecht Kossel, University of Heidelberg, and Professor Russell H. Chittenden, Yale University.

There is also a section of Technical Chemistry.

The Department of Medicine will meet on Saturday, September 24, the Chairman being Dr. Hobart A. Hare, of Jefferson Medical College, and the speakers Sir Lauder Brunton, F.R.S., and Professor Mathias, E. O. Liebreich, University of Berlin. Among other notable contributors to this department are Dr. William Osler, Professor-elect of Medicine at Oxford University; Professor Ronald Ross, F.R.S., of the Liverpool School of Tropical Medicine; Professor T. Clifford Albutt, F.R.S., University of Cambridge; and Sir Felix Somon, K.C.V.O.

ANOTHER CHESTNUT.—The chemist's night bell rang furiously, and with a much-ruffled temper the worthy dispenser dressed and opened his shop door. "I want a bottle of soda-water, please," said the complacent individual who stood without. For a moment Mr. Squills was inclined to be personal, but then he reflected that, since he had come down, he might as well do business. "Sixpence, please," he said; "twopence will be allowed on the bottle when returned." Then he went back to bed. Two hours later he was awakened by another ring. Again he descended to find the same complacent customer at the door. "Here's your bottle," he remarked. "Gimme my tuppence!" He got it, but the chemist's remarks were really unprofessional.

Inorganic Chemistry.

Its Present Problems.

Abstract of an Address delivered at St. Louis on Wednesday, September 21, at the International Congress of Arts and Sciences.

By SIR WILLIAM RAMSAY, K.C.B., F.R.S.

NO attempt to reduce the irregular regularity of the atomic weights to a mathematical expression has succeeded, and it is unlikely that any basis of physical meaning in such expressions will be found. The central problem in inorganic chemistry is to answer this question: Why this incomplete concordance? The author referred to (1) variation of molecular surface-energy with temperature; (2) volume energy of gases; (3) specific heats of elements; (4) the ion; and (5) the factors of chemical energy—atomic weight and chemical potential. Surface, volume, thermal, electrical, and no doubt other forms of energy have as capacity-factors magnitudes either identical with or closely related to units of chemical capacity; while kinetic and linear energy are not so related except through the periodic arrangement of the elements. The problem of valency as a function of temperature was discussed, and the investigation of the structure of matter was referred to as a futile field of inorganic research, although that has not been the case in organic chemistry. This led the author to speak of the influence of stereo-chemistry, in this connection referring to Collie's configuration of molecules and work by Le Bel, Pope, and Smiles, which led to the hope that we shall be able to classify other elements than carbon, nitrogen, tin, and sulphur on a stereo-isomeric basis. Reference was next made to catalysis, and it was stated that no guide exists which would enable us to predict that any particular substance would cause acceleration or retardation of any particular reaction. Catalytic agents are generally those which themselves, by their power of combining with or parting with oxygen, or some other element, cause the transfer of that element to other compounds to take place with increased or diminished velocity. The interpretation of chemical change in the light of the ionic theory may now be taken as an integral part of inorganic chemistry, and the speaker, referring briefly to this, proceeded to speak of the phenomena of radio-activity, describing the chief results by the workers in this domain. Here Sir William spoke more fully in regard to atomic synthesis, but not adding to his previous statements as to the origin and duration of radium. He then said:

Electrons are not matter, but they are capable of causing profound changes in matter. For the past year, a solution of radium bromide has been kept in three glass bulbs, each connected with a Toppler pump by means of capillary tubing. To ensure these bulbs against accident, each was surrounded by a small beaker; it happened that one of these beakers consisted mainly of potash glass, the other two were of soda glass. They are contained in that very viscous liquid—glass—in the colourless ionic state, but these ions are discharged by the *b*-rays, or negative electrons, and each metal imparts its own peculiar colour to the glass, as has been shown by Maxwell Garnett. This phenomenon, however interesting, is not the one to which I desire to draw special attention. It must be remembered that the beakers have been exposed only to *b*-rays: *a*-rays have never been in contact with them; they have never been bombarded by what is usually called matter, except by the molecules of the surrounding air. Now, these coloured beakers are radioactive and the *radio-active film dissolves in water*. After careful washing, the glass was no longer radioactive. The solution contains an emanation, for on bubbling air through it, and cooling the issuing air with liquid air, part of the radio-active matter was retained in the cooled tube. This substance can be carried into an electroscope by a current of air, after the liquid air has been withdrawn; as long as the air-current passes, the electroscope is discharged. The period of decay of this emanation is, however, very rapid, and on ceasing the current of air the leaves of the electroscope cease to be discharged. In having such a short period of existence this emanation resembles the one from actinium. Owing to the recess, only a commencement has been made with the investigation of the residue left on evaporation of the aqueous solution. On evaporation the residue is strongly active. Some mercurous nitrate was then added to the dissolved residue and it was treated with

American Pharmaceutical Association.

hydrochloric acid in excess, to precipitate mercurous chloride. The greater part of the active matter was thrown down with the mercurous chloride, hence it appears to form an insoluble chloride. The mercurous chloride maintained its activity unchanged in amount for ten days. The filtrate from the mercurous chloride, on evaporation, turned out to be active; and on precipitating mercuric sulphide in it, the sulphide precipitate was also active; but its activity decayed in one day. The filtrate from the mercuric sulphide gave inactive precipitates with ferrie salts and ammonia, with zinc salts and ammonia sulphide, with calcium salts and ammonium carbonate; and on final evaporation the residue was not radio-active. Hence the active matter forms an insoluble chloride and sulphide. The precipitated mercurous chloride and mercuric sulphide were dissolved in aqua regia, and the solution was evaporated. The residue was dissolved in water, and left the dish inactive. But the solution gave an insoluble sulphate when barium chloride and sulphuric acid were added to it, hence the radio-active element forms an insoluble sulphate, as well as an insoluble chloride and sulphide.

The above results were obtained from a mixture of potash and soda glass; somewhat different results were obtained from the potash glass alone. These changes appear to be due to the conversion of one or more of the constituents of the glass into other bodies. Neither of the samples of glass contained lead. These experiments suggest wholly new lines of investigation. It would appear that if energy can be poured into a definite chemical matter, such as glass, it undergoes some change and gives rise to bodies capable of being tested for. Sir William imagines that radio-active forms of matter are produced either identical with or allied to those at present known; and just as radium and other radio-active elements suffer degradation spontaneously, so, if energy be concentrated in the molecules of ordinary forms of matter, a sort of polymerisation is the result, and radio-active elements, probably elements with high atomic weight, and themselves unstable, are formed.

Trade-marks Applied For.

Objections to the registration of any of the undermentioned applications should be lodged with C. N. Dalton, Esq., C.B. Comptroller-General of Patents, Designs, and Trade-marks at the Patents Office, 25 Southampton Buildings, Chancery Lane, London, W.C., within one month of the dates mentioned. The objection must be stated on Trade-marks Form J, cost £1, obtainable through any money-order office.

(From the "Trade-marks Journal," September 21, 1904.)

- "SAFEGUARD," and device of a Horse Guardsman; for a disinfectant-soap. By C. J. Davies, Cedar Holme, Wellington Square, Cheltenham. 264,828.
- "QUINOLA" ("Quin" disclaimed); for veterinary preparations. By F. Hewthorn & Co. (Limited), 70 Finsbury Pavement, E.C. 264,897.
- "MORSAGERM"; for disinfectants. By F. Hewthorn & Co. (Limited), 70 Finsbury Pavement, E.C. 264,898.
- "PESTOL" ("Pest" disclaimed); for an insecticide. By C. Hall, 5 St. James Street, Bacup, Lancs. 265,371.
- "LUSOFORM"; for chemicals. By the British Lysiform Company (Limited), 34 Old Broad Street, E.C. 265,513.
- "J. SHARPLES," and device of a camp-stool; for an ointment for human use. By J. Sharples, 69 Lime Street, Newton Heath, Manchester. 264,513.
- "ST. JAMES WAFERS," and device; for a medicine. By the Franco-American Chemical Company, also trading as the St. James Wafers Company, 124 Southwark Street, S.E. 262,864.
- "PEPTOLAXA"; for a medicine. By the Dr. Williams Medicine Company, Fulford Place, Brockville, Canada, and 46 Holborn Viaduct, E.C. 264,977.
- "SONBODIA"; for a salve for human use. By James Dobson & Son, 9 Institute Row, W. Sleekburn, Morpeth. 265,402.
- "NUCLON"; for chemicals. By A. E. Angier, A. McF. Davis, and J. L. Ward, 32 Snow Hill, E.C. 265,465.
- "CIMEBU"; for chemicals. By E. J. Coppen, 11 Wilson Road, Westcliff-on-Sea. 265,744.
- "THYMOLETS" ("Thymol" disclaimed); for lozenges and pastilles. By W. Marley, 124 Northumberland Street, Newcastle-on-Tyne. 265,764.
- "CUROSOL" ("Curo" disclaimed); for a boot and shoe sock. By A. Brunyee, Avalon, St. Anne's Road, Harrow, chemist. 265,668.

THE final sheets of our reporter's MS. came to us as we were going to press last week, and we therefore selected merely the more important facts from it. He informs us that Kansas City entertained the members in royal fashion, the protracted sessions frequently extending far into the night. The feature of the entertainment was the excursion to Fort Leavenworth, Kansas, one of the principal military posts in the U.S., situated on the banks of the Missouri River. The whole garrison (2,500 troops) was paraded for the benefit of the Convention.

The Historical Section of the Association promises to be one of the main features of future meetings. Considering the short period during which pharmacy in America has existed, it is surprising how much of historic interest has been presented. With the advantages possessed by English pharmacy in this particular, a similar section of the B.P.C. could be made of surpassing interest.

A tally-ho ride round the city opened the eyes of the Eastern visitors. By an ingenious system of taxation the city is acquiring magnificent boulevards at no expense to the general taxpayer. Those who wish to build on the boulevards must pay their share of the expense of making the roads, the result being a series of magnificent residences as well as an unsurpassed roadway.

The recently formed Section on Practical Pharmacy and Dispensing is increasing the attendance of the ordinary retailer and drawing sharper the lines between the practical men and the "scientists and college professors." By a new by-law the officers of this section must be men actually engaged in retail pharmacy.

These annual gatherings have resulted in the formation of two new bodies which promise to do much for the future of pharmacy in the United States. One is the Conference of Pharmaceutical Faculties, to which are admitted only the Faculties of recognised and well-established colleges, the mushroom college and diploma-mills being barred. The object is to secure uniform methods of teaching in the various colleges. The other is the Conference of Boards of Pharmacy, composed of the members of the various State Examining Boards. The object in this case is to secure uniform methods of examining candidates, and, if possible, uniform State laws and interchange of diplomas.

THE PAPERS.

ADJUSTABLE LABEL-DRAWER.—Mr. M. I. Wilbert's note (previously referred to) described his experience. After trying various plans in the German Hospital, Philadelphia, where he is dispenser, Mr. Wilbert decided on a system of units, consisting of tin boxes with open sides or ends. The accompanying diagram illustrates a unit, and the method of making it. Fig. 1 represents a sheet of tinned iron, or other suitable sheet metal, which is cut as indicated by the

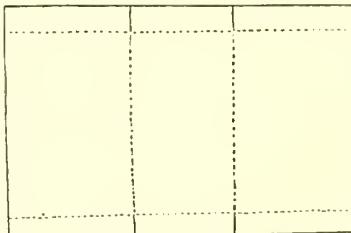


Fig. 1.

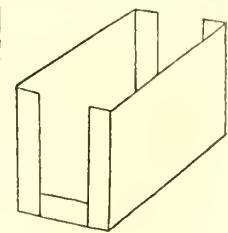


Fig. 2.

solid lines in the diagram, and then folded or bent at right-angles along the dotted lines, over a suitable block or mould, to form the box as shown in fig. 2. The size of the original piece of metal, as well as the resulting box, can, of course, be varied to suit the size of the label used. The labels used at the author's hospital are 35 by 65 mm., and the boxes are 40 mm. wide, 75 mm. long, and 50 mm. high. In practice these boxes can be arranged in any desired way, in shallow drawers or trays that fit into a large drawer. The labels are arranged in groups, and the class of preparations for which each group is intended is indicated on the outside of the drawer. One of the advantages of this system is that the units can be arranged or rearranged in any desirable way with little or no expenditure of time and with no risk of disarranging or disturbing the labels themselves. If

thought desirable the units composing the drawer or rack can be fastened together or locked, either by means of a suitable strip of metal or by the use of a clamp made of spring wire that will securely hold two or more of the boxes together.

CURING LEAVES.—One of the most interesting papers presented to the Scientific Section was entitled "The Curing of Leaf-drugs, with Especial Reference to their Appearance." It was by Messrs. R. H. True and W. W. Stockberger, of the U.S. Bureau of Plant-industry. The authors discussed at length the formation of colouring-matters in leaf-plants, and pointed out that the changes in colour were due to the action of oxydases. In curing leaf-drugs so as to retain the brilliant colour of the fresh leaf, the following instructions should be observed:

Dry so that the loss of water is steadily maintained until a desiccation is reached which inhibits chemical reactions in the cells. If artificial heat is used, do not heat high enough to injure the protoplasm, since the death of the cells should only be brought about by water-loss. After the protoplasm is killed, dry more rapidly until chemical reactions are all inhibited. If the leaf has volatile constituents, keep the temperature low, but secure a steady water-loss. Since strong light changes chlorophyll to a greenish-yellow colour, avoid long exposure to direct sunlight.

COD-LIVER OIL.—Mr. E. H. Gane, in continuation of his work reported to the Association last year, dealt with the tests for this oil, saying that continued experience has shown especially the value of the nitric-acid test. The beautiful rose-pink colour, rapidly changing to a lemon-yellow, which persists for many hours, is exceedingly characteristic, and is not given by any of the substitutes or adulterants. Nitrosulphuric acid does not give such accurate results, as the end-reaction (the change to lemon-yellow) is entirely obscured, the mixture of oil and acid assuming a brownish colour and leading to inaccurate deductions. Performed with care and avoiding excess of acid, the nitric-acid test is one of the most valuable at our service at the present time. Two drops of acid to 15 drops of oil is recommended as the most satisfactory proportion for general use. This test alone will detect admixture with most of the usual adulterants, and is particularly serviceable in detecting admixture with vegetable oils, lard oil, and some other fish oils. The determination of the percentage of free fatty acid is important from a medical as well as an analytical standpoint. An oil containing a high percentage of free acid

is much more liable to cause eructations when administered internally. The test is performed as follows:

Weigh carefully 25 to 50 grams of oil into a 6-oz. or 8-oz. flask, and add 100 c.c. of alcohol carefully neutralised. Shake well, and raise to the boiling-point by means of a water-bath. Then add a few drops of phenolphthalein, and run in, very cautiously, a semi-normal solution of soda or potash from a burette or accurately graduated pipette until the liquid assumes a permanent pink tint. Note the number of cubic centimetres of caustic alkali used and multiply this by 0.141, which will give the amount of free fatty acid present in the given weight of oil, calculated as oleic acid. The percentage can then readily be determined.

Out of sixteen samples of cod-liver oil examined seven contained less than 1 per cent. of acid, and only four contained more than 2 per cent. The author described in this connection a container (Fig. 3) for oxidizable liquids, such as cod-liver oil. The tank is of tinned copper holding one to two barrels, and works like an ordinary wash-bottle, C being attached by an india-rubber tube to a cylinder of liquid carbonic-acid gas. The liquid is delivered at B in any quantity.

OTHER PAPERS presented were "Examination of some Official Drugs," by Dr. D. Rose, of the Maryland College of Pharmacy; "Saponin as an Emulsifying-agent," by Mr. H. P. Hyson, of Baltimore (in which it was pointed out that, the toxic action of saponin being directly upon the lung-tissue, this preparation should not be used as an emulsifying-agent for drugs intended as tissue-builders). The need for greater care in the making of clinical thermometers was pointed out in a paper by Mr. C. A. Mayo, editor of the "American Druggist," who stated that examination of over 150 thermometers purchased from retailers showed that 33 per cent. were inaccurate and unfit for bedside use. The

paper described the methods of examination employed by the U.S. Bureau of Standards.

The committee on the President's address favoured most of the recommendations contained therein. The chief result was the appointment of a Committee on Publicity, with the object of increasing the membership, and the permanent establishment of the Historical Section.

M.E. Lancashire Chemists' Association.

A SPECIAL MEETING of this Association was held at the White Bull Hotel, Blackburn, on September 27, when Mr. R. Lord Gifford read a paper on the

PRESENT POSITION OF PHARMACEUTICAL POLITICS.

The chair was occupied by Mr. T. Critchley, jun., and there was a representative attendance.

Mr. Gifford said he supposed the generally accepted idea regarding the present position of pharmaceutical politics was one of hopelessness of any good resulting. For several years a draft Bill had been presented to Parliament, and each year in a more or less perfunctory manner members of Parliament had been waited upon and their interest solicited. But in spite of all that had been done no progress could be reported. It did not follow, however, that no useful object was served by introducing a Bill. It was necessary to present one to Parliament because it formed a responsible statement of the chemists' case and of the remedy suggested by the Council. Mr. Gifford then proceeded to impress upon his younger colleagues that their truest interests were involved in the question of establishing a professional principle. All that needed to be done was to separate trading from professional matters. Let them combine or protect their trading interests in whatever way their judgment decided, but never forget the importance of preventing title and practice from becoming common property. Coming to the present position of affairs, he said they faced a dead wall. Orthodox methods were played out long ago, and means must be devised which would have the desired object. He was very hopeful. After all, a little pressure from members, a little more co-operation, a little more of adapting the means to the end on the part of the Council, and all would yet be well. Mr. Walter Hill's work on the Poison Committee and the Pharmacopœia Committee was highly spoken of, and then Mr. Gifford outlined his scheme of an organising secretary and gave a dig at the Federation, which had, he said, become an anachronism. The speaker finished by urging that an agitation be organised on the lines of "practice and title for qualification." Let chemists insist that their qualification be a reality, and allow no other question to obscure that issue until a satisfactory settlement is obtained.

Alderman Shorrock (Darwen), in moving a vote of thanks, said the business of the chemist is now broken up and disseminated among a number of traders.

Mr. Joseph Hindle (Secretary), in supporting the motion, said that he sometimes thought it would not be a bad thing to throw all professional principles to the wind and go in for a living. Companies did not care a hang for the profession, all they wanted to do was to rake in the shekels, and it did not matter to them by what means they did it; and he was beginning to think that the more they humbugged the public the better they liked it. He would like Mr. Gifford to explain how he expected local organisations to become a greater help to the parent body than they were at the present time.

Mr. W. Holt said he was in hope of Mr. Gifford suggesting the giving-up of the charter of incorporation of the Society into the hands of a Government Department, so that the Department might be better able to see the absurdity of the position of the qualified chemist of to-day.

The motion was adopted, and

Mr. Gifford, in reply, said he looked forward to the time when the members of the Council who came up from different parts of the country should every month discuss questions as they were submitted from local organisations, and should so perfect the machinery that they could set into motion this or that agitation for the benefit of the trade in general.

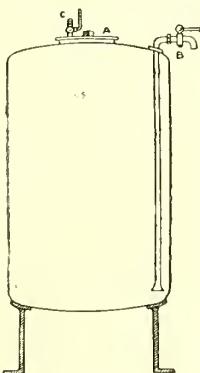


Fig. 3.

The *Kalcidoscope*.



A Blue Look-out for CHCl_3 , etc.

An official report from the American Consulate at Freiburg, in Germany, gives extraordinary results attained by blue light as an anaesthetic. The patient is shut in a dark room, with his eyes exposed to a blue light. Three minutes after exposure his teeth are extracted without pain. Despite the anaesthetic, which apparently only numbs the nerves, the patient sees and hears all the time.

Association of Chambers of Commerce.

THE autumn meeting of this Association opened at Manchester on Wednesday, September 28, about 370 delegates being present. Sir W. H. Holland, M.P., one of the members of the Spirit Inquiry Committee, presided,

and in the course of his address, after speaking about the proposed Ministry of Commerce and Labour, referred to the duty-free alcohol matter, saying it was to the credit of the Chancellor of the Exchequer that he had approved that Committee. The more carefully the question was investigated the more manifold would be found to be the benefits which their industries might derive from untaxed alcohol. The President then dealt with international treaties, and said he believed there is a prospect of a new arbitration treaty with Germany. He also spoke about the war in the East and various questions of the agenda of the meeting.



SIR W. H. HOLLAND, M.P.,
Member of the Duty-free
Alcohol Committee.

Several motions in regard to

TECHNICAL EDUCATION

were submitted, the following one from Leeds embodying the leading principles of the rest :

That the Government should organise on a systematic basis progressive courses of work in modern languages and

commerce in technical and evening schools, and should subsidise such courses more liberally than had been done in respect of the isolated subjects in the past; that in addition the Government should establish and subsidise day courses in commerce in technical institutes, and should consider the advisability of awarding group certificates to students who had successfully worked through all the above courses, with the idea of the same becoming the recognised standard of efficiency; also that the Government should consider the advisability of recognising the better preparation in commercial subjects and modern languages of students at secondary schools during the last year or two of their school course, so as to more fitly prepare them for commercial life.

The meeting eventually adopted a proposal, submitted by Sir Albert Rollit, M.P., that the main principles of the resolutions of Leeds, Blackburn, and London should be approved, and that a resolution should be drafted by the Council of the Association for presentation to the Board of Education by a deputation. The following was added as a rider :

That the Government be also urged to avail itself so far as possible of existing organisations for commercial education and examination in connection with London and other Chambers of Commerce.

The rest of Wednesday was devoted to a discussion on the nationalisation of canals, but before the members adjourned for the day they expressed by resolution gratification at the conclusion of the recent Anglo-French agreement.

Association Ballads.

THE PURPOSE.

*The men, their aims, their daily irk;
Their troubles, trials, thoughts, and views
On things politie, foes that lurk
In friendly guise, but treach'rous work—
These be the burden of our Muse.*

XXXVIII. LINCOLN.

At Lincoln, when the sun is low,
Despite the rain, the wind, the snow,
The chemists close their shops, and go
Straight to the Coffee Palaces.

Good Birkbeck sounds the clarion note,
And forthwith brethren meet to vote
On schemes ashore and schemes afloat
In pharmaceutic politics.

They march to Battle, fast and free,
And Aram (though not Eugene he)
Dreams golden dreams of pharmacy,
As Elmitt orates rapidly.

They say primeval cold neglect
Now does so seriously affect
The modern progress of our Sect
We're suffering for idolatry.

Then some expose prescribers' faults
Or where dispensing doctor halts,
When sacchar. ust. and Epsom salts
Predominate the surgery.

When Someone's pill and T'other's tab.,
Or powder from some German lab.,
Are ordered, with synthetic swab
To soothe diseased peripheries.

There Dixon, Wilmot, Watson meet,
The legislative schemes to greet
Of sapient Rulers sent to beat
The Jesses full of jugglery.

And Dobbs, or Cross or Harrison,
The "Free-to-poison" garrison
Who challenge a comparison
With legislative burglary.

There Pata's prophet rules the roast,
And Vermin-Killer's treasured most,
But this is Lincoln's treasured boast,
"We'll raise the Cutler's sepulchre."

NORTH OF ENGLAND PURE OIL-CAKE COMPANY (LIMITED).—Capital 5,000*l.*, in 1*l.* shares. The first directors are S. Leetham, H. E. Leetham, A. Leetham, R. E. Leetham, and J. Fearnside. Registered office, Nelson Street, Thorby-on-Tees.

Observations and Reflections.

By XRAYSER.

The Discovery of Pepsin

can hardly be credited to any other investigator than Schwann. It was he who first recognised its fermentative action, and it was also he who gave it its name. But in connection with pepsin the earlier experiments of Spallanzani of Pavia ought not to be forgotten. His work was published in 1780. Previously the action of the gastric juice was totally ignored. He extracted it and showed that it would dissolve fibrin even in a glass vessel. The English anatomist John Hunter warmly contested his views, but Spallanzani completely established his theory.

The Ideal History of Pharmacy,

which is not yet published, will devote a large section of its space to records of the "non-proprietary specialities" which have figured so prominently in popular therapeutics. How they came to be introduced, why they attained popularity, their ultimate apotheoses in some Pharmacopœias, or in other cases their lingering deaths—these details are not to be found in any of the numerous existing treatises, though Dr. Paris and Daniel Hanbury went a little way in their direction. Naturally many of the names associated with medicines which have acquired a modified immortality have been those of quacks; it was their special interest to couple the name with the remedy. But there are plenty of other examples. Sydenham's laudanum, Gregory's powder, Hoffmann's anodyne were remedies devised by physicians of the highest reputation and published without any idea of personal gain.

Place aux Charlatans.

The story of these would probably be the most readable in my ideal history. They were not by any means necessarily cheats—many of them rendered notable service to humanity—but in all cases they exploited a remedy for their own direct profit. The Reverend Thomas Daffy may be cited among these. This worthy clergyman was the inventor of

Daffy's Elixir Salutis,

a medicine which undoubtedly attained considerable fame in the latter half of the seventeenth century, as allusions to it in the literature of the period prove. How its proprietor made its virtues known to the public, I cannot say. He was an Episcopalian clergyman "in actual practice as such." He was appointed to the living of Harby, in Leicestershire, by the Earl of Rutland in Cromwell's time. But congregations were, to put it mildly, critical in those days, and the Countess of Rutland, who had puritanic inclinations, found the Rev. Thomas too high, and had him transferred to an inferior living at Redmile, also in Leicestershire. He had a son, Daniel, an apothecary at Nottingham, who sold the preparation during his lifetime, and advertisements in the "Post Boy" in 1707 show that his daughter, Catherine, was continuing the sale of the elixir then. It appears from her advertisement that the widow of Anthony Daffy, a relative, also claimed to be in possession of the secret. Perhaps Messrs. Sutton & Co., who now make "the original Daffy's," can fill in this outline. I understand that tr. sennæ co. of the Pharmacopœia was devised as an imitation of the "Elixir Salutis."

Helvetius,

whose name is retained in many formularies in connection with a collyrium (composed of a solution of sulphate of copper, alum, and nitre in camphor-water,

practically the "Lapis Divinus"), a powder (alum and dragon's blood), and a styptic (iron filings and cream of tartar), was a magnificent and really talented charlatan. His father was a Dutch physician and alchemist, who owned several medicinal specialities. He sent his son to Paris in the last quarter of the seventeenth century to sell these. The family name was Schweitzer, but its Latinised form was a better name to take to Paris then, as it would be now. The young Helvetius soon became the fashion; but he made his great hit with a new drug which a merchant named Garnier had brought from Brazil. It was called "Ipecacuanha," and in early trials had not proved successful as it was given in too large doses. Helvetius gave it in small doses, and effected many cures of dysentery with it. His fame reached the Court, and the Dauphin, obligingly falling ill with dysentery, was promptly cured by Helvetius. Louis XIV. thereupon granted him a monopoly by "lettres royales" authorising him to sell the drug for four years "as a specific for the infallible and final (*sans retour*) cure of flux of the belly and dysentery." The document was dated July 19, 1688, but apparently Helvetius compounded his monopoly for 1,000*l.*, which was paid to him the same year, and his secret was published. Garnier claimed a share of the money but failed to satisfy a Law Court of his title. The son of this Helvetius became a fashionable physician in Paris, and was rich enough to purchase for his son a position as one of the farmers of the Revenue—an office which yielded him an income of 100,000 crowns. He was said to be the handsomest young man in France, became immensely popular, aimed at literary fame, and wrote "De l'Esprit," which everybody read, but which the pious Louis XV. found dangerously materialistic. By the King's order it was burned by the public executioner. A marked strain of quackery ran through the four generations.

Baume de Fioraventi

still figures in the French Codex, and I believe in most continental Pharmacopœias. Fioraventi was a famous Italian quack in the latter half of the seventeenth century. He travelled about from Naples to Rome, to Venice, to Milan, and to Florence, and was especially honoured in his native city of Bologna, where he was made a Doctor, a Chevalier, and a Count, titles of which he made the fullest use. He published a great many works on medicine, compiled numerous "Nostra," pretended to give the exact formulas, and made a lot of money. His medical advice though crammed with bombast, was fairly sensible, but for all cases he recommends one or other of "our" remedies. There were "our Balm Artificial," "our Electuaria Angelico," "our Sirup Solutivo," "our Lignum Sanctum," "our Oleum Benedictum," and so forth. He opens his book of "rational secrets" with the formula for a

Petra Philosophale.

Philosophers had long disputed, he says, on the question whether it was possible to produce a medicine which would cure all diseases. The dispute was settled by "our Petra Philosophale." The directions for making it were most elaborate, and of course required laboratory apparatus. Briefly the process was to take so much "Sal Niter, Roche Allum, and Roman Vitrioll" (I take the names from an English translation), add some Sal Gemmae, and distil. Then mix Mercury, Sope, Quick Lime, and Common Ashes, sublime off the Mercury, and add it to the first distillate. To the mixture add so much steel, iron, and gold, dry to a stone, wash with rose water, and keep it as a precious Jewell in a closed glass vessel. Probably patients would prefer to buy the precious "Jewell" from the inventor, and so be sure to have it right, rather than make it at home. It will be noticed that the three discoverers whom I have so briefly sketched, France, Italy, and England did adorn at about the same time.

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The Poisons Schedule.

Two coroners' juries last week made a recommendation in regard to the dispensing and sale of poisons which is worthy of consideration by chemists and druggists and their representative body—the Pharmaceutical Council.

The same Coroner (Mr. Walter Schroeder) presided over both inquests, and we may assume that he inspired the recommendation "that the practice of supplying poisonous drugs on production of old-dated prescriptions without the authority of the medical attendant should be discontinued." A problem is involved in this which properly falls to the consideration of the Pharmaceutical Council as the statutory body which has to see that the Sale of Poisons Act is well administered. If the Council were more in the nature of a Board of Pharmacy and less a body whose time is taken up by occasional business enterprises, there would be less need to remind it of its duties. The Council is in a difficult position, it is true, for as representing its members, and presumably the whole body of chemists and druggists, any movement it may undertake to further extend the poisons schedule is apt to be regarded by the Cross-Dobbs party as protection to chemists' interests. Hence the Council usually hesitates to add to the schedule. But we wonder for what reason it has hesitated for eighteen months to place greater restrictions upon the sale, among other things, of hypodermic injection of morphine? It will be remembered that the Committee on Poisons suggested additions to the present schedule, which could have been made by resolution of the Pharmaceutical Council and the approval of the Privy Council. The additions to the two parts were as follows:

PART I.

Arsenic and its preparations, except any preparation prepared exclusively for use in connection with agriculture or horticulture, and contained in a closed vessel or receptacle, distinctly labelled with the word "Poison," the name and address of the seller, and a notice of the agricultural or horticultural purpose for which the preparation has been made.

Alkaloids.—All poisonous vegetable alkaloids and their salts, and all poisonous derivatives of vegetable alkaloids, except preparations of tobacco, or the alkaloids of tobacco, prepared exclusively for use in connection with agriculture or horticulture, and contained in a closed vessel or receptacle distinctly labelled with the word "Poison," the name and address of the seller, and a notice of the agricultural or horticultural purpose for which the preparation has been made.

Cocaine and its salts.

Morphine and its salts and preparations containing one or more per cent. of morphine.

Picrotoxin.

Vermic Killers, containing poisons included in Part I.

PART II.

Acetanilide (Antifebrin) and its preparations.

Cocaine, preparations of.

Digitalis and its preparations.

Morphine, preparations of, containing less than one per cent.

Soluble salts of Oxalic Acid.

Mercuric Iodide.

Mercuric Sulphocyanide.

Strophanthus and its preparations.

Sulphonate.

Mr. Walter Hills in his minority report agreed to all these except the change in the wording as regards arsenic and the alkaloids, and he remarked :

Most of the foregoing articles have been the subject of representation to your Grace by the Council of the Pharmaceutical Society, and could have been added to the schedule naturally as the result of the ordinary operation of Section II. of the Pharmacy Act—the statutory machinery provided for that purpose.

The matter came before the Pharmaceutical Council at its meeting on March 4, 1903, when

After some discussion Mr. Robinson moved, and it was seconded and carried, that the recommendations of the Law and Parliamentary Committee regarding the proposed additions to the poisons schedule be referred to the General Purposes Committee to consider the exact wording of the suggested alterations.

From that day to this not a single word has been said about the matter publicly, and, as far as we are aware, it

has been completely forgotten. It may be that in the private negotiations with Privy Council representatives something has transpired which warrants delay; if so, that was a good reason for some public statement in regard to it being made before now. It is not too late yet.

It may be possible to secure greater control of the sale and dispensing of poisons through the schedule: the terms upon which carbolic acid and its liquid preparations were scheduled, and the suggestion in regard to morphine preparations containing more than 1 per cent., show the way. Whether further restriction than is provided in Section 17 can be applied to medicines dispensed is another matter. It will be remembered that under the Arsenic Act the exemption on this point is very precise. It says:

This Act shall not extend to the sale of arsenic when the same forms part of the ingredients of any medicine required to be made up or compounded according to the prescription of a legally qualified medical practitioner, or a member of the medical profession.

It was sought to have the same phrasology incorporated in the Pharmacy Act, but this was objected to, and therefore the law in regard to all poisons dispensed except arsenic is

Nothing contained in Section 17 shall apply to any medicine supplied by a legally qualified medical practitioner to his patient, or dispensed by any person registered under the Act.

As we stand at present, a medical practitioner's prescription is not necessary at all when dispensing poisons, and all that coroners' juries say about repetition of prescriptions and absence of proof that prescriptions are actually written by medical men has no justification in the law's requirements. For that reason the Pharmaceutical Council would probably not be justified in making schedule conditions which would prevent repetition of prescriptions; but it may be done through extremely liberal interpretation of the provision in Section 1 of the Act, which empowers the Pharmaceutical Society, with the consent of the Privy Council, to prescribe regulations as to the keeping, dispensing, and selling of poisons. We already have such regulations, but can they be extended to include, say, "Cocaine shall not be sold to a coca-maniac"? or "Morphine shall not be dispensed without the written authority of a medical practitioner for and on each occasion"? The circumstances of a few isolated cases do not require a general tying of the hands, but the present is a good opportunity for the Pharmaceutical Council to go into the whole matter—in the first place, with the view to bringing the schedule more up to date, and, in the second, to ascertain whether some of the powers in the 1868 Act have not been neglected.

South African Spirit-duty.

THE editorial note contained in the *C. & D.* of August 13, stating that the Natal Government had withdrawn the spirit-duty, was a great surprise to the Cape trade. This is by no means the first time that chemists at one end of South Africa have got to know what is going on at the other by way of London and the *C. & D.* Looking at the subject from an inter-State point of view, it presents most serious features, and there is something radically wrong somewhere. Perhaps it would not be going too far to blame all the Governments equally. The Customs Union is an inter-State treaty which must be kept by the signatories. If they cannot agree as to the definition of a clause, it would be an easy matter to put machinery in operation to decide the issue. Each State so far has taken the other to be highly honourable on paper, but quite the reverse in action. When it was stated in the *C. & D.*

some weeks since that the tariff was a veritable masterpiece of literature more suggestive of a small South American Republic than a civilised country governed by Anglo-Saxons, some of our readers in South Africa took exception to the analogy, but since the beginning of 1901 this journal has demonstrated from time to time that the Customs within their own particular State at their own ports, interpreted item after item in connection with the drug and allied trades according to their own views, and not on any general rule or understanding.

As soon as the issue of the *C. & D.* of August 13 reached South Africa, a section of the wholesale trade was displeased at the way things were working, and made no secret of their disgust when calling on our correspondent to know if what appeared in the *C. & D.* was correct, and if he would, on behalf of this journal, take the responsibility for the paragraph in question. This our correspondent readily did, and assured the trade that the fact therein stated was in force at that moment—September 1. Visits were then made to the Treasury and the Collector of Customs, who promised to “see about it”; and that is all the satisfaction the trade could get.

Tinctures and spirituous preparations passing through Cape ports, destined for the Transvaal, have paid the spirit-duty when cleared at the port, while if cleared at Pretoria or Johannesburg they have paid the old *ad valorem* rate only. When this class of merchandise was landed at Durban the *ad valorem* rate was levied, and druggists in Natal shared the same kind consideration. At Lourenço Marques, where the Transvaal Government has a Custom-house, the same obtains. The Cape Controller of Customs, who was up-country on official business, was instructed to proceed to the Transvaal and thence to Natal headquarters to settle the question, but he returned on September 6, and it is understood that the matter has been referred to Lord Milner. As to the Transvaal, our latest information is that the matter has been shelved for a year, but the following communication has been received by the Pharmaceutical Society there :

L.G. 25/33. Lieutenant-Governor's Office, Pretoria,

19th August, 1904.

SIR.—I have the honour, by direction of his Excellency the Lieutenant-Governor, to acknowledge the receipt of the petition addressed by the chemists and druggists of this Colony to his Excellency the Governor, and, in reply, to request that you will be so good as to inform the signatories to the petition that the question of the liability to duty of medicinal preparations containing alcohol is now forming the subject of correspondence between the various parties to the South African Customs Union, and that, before any alteration in the present classification is made, the Transvaal Chemists' and Druggists' Association will be given an opportunity of expressing their views to the Government.

At this stage, therefore, his Excellency does not think that any good purpose would be served by meeting a deputation from your Association.

I have the honour to be, etc.,

G. GLYN, Private Secretary.

The idea of taxing tinctures and other medicinal preparations containing spirit at 15s. per proof gal. originated in Cape Colony, and was intended as both a sop to the Bond and protection to the wholesale trade in the Cape Colony. The Cape Colony and Orange River Colony are more or less of one opinion with regard to the duty, and they have been collecting it. Natal and the Transvaal hold other ideas. Either one side or the other has taken up an untenable, if not illegal, position, for, as we have shown, the wording of the Bloemfontein Convention does not justify the imposition of the same tax upon spirituous medicines as upon whisky.

For the information of our readers we append official messages to our representative at Cape Town, which cover

the interpretations of the South African Customs Union Tariff at the different centres of Customs at the dates mentioned—i.e., two months after the new regulations were supposed to come into force in all States within the Union. The question put to the Bloemfontein and Pretoria officials was: “What duty is your Government levying on oversea tinctures and spirituous preparations?”

From Director of Customs, Pretoria. September 1, 1904.

Bonâ-fide medicinal tinctures and medicinal spirituous preparations imported in bottle are at present being admitted at the *ad valorem* rate.

From Customs, Bloemfontein. September 1, 1904.

Duty levied here on spirituous tinctures 15s. per gal., and in addition 10 per cent. *ad valorem*, but *bonâ-fide* medicines containing spirit when imported in bottles ready for sale over the counter to the public without alteration or diminution of contents 25 per cent. *ad valorem*, subject to preferential rebate, on the *ad valorem* charge if British manufacture.

The following is the telegram sent to Durban :

Champion communication English Press states Natal withdrawn spirit-duty tinctures spirituous preparations. Confirm or contradict. What duty levied now?

To this the following reply was received :

From Customs, Durban. September 1, 1904.

At present not imposing spirit-duty.

The Cape Controller of Customs left Port Natal on September 1, and it was accordingly thought that the matter may have been settled after this interchange of communications. Our correspondent therefore telegraphed again to Durban as follows :

Understand Wiltshire conferring spirit-duty medicinal products. Wire if you alter duty.

The official reply was :

From Customs, Durban. September 3, 1904.

Natal not changed duty on spirituous medicinal products.

There the matter stands at present, but the agitation is still going on. Retail chemists throughout South Africa are working hard to get the original intention of the Bloemfontein Conference, as proved by the common action of the four Customs, maintained—viz., that the *ad valorem* duty of 10 per cent. should be continued. Three of the wholesale houses are working as strenuously to get all the States to follow the Cape lead, and it is perhaps not astonishing that the Cape Chamber of Commerce sought the help of two of these houses to reply to the Chemical and Drug Trade Section of the London Chamber, and ignored the principal of a fourth house who is not altogether in favour of the 15s. spirit-duty. The reply is expected by the mail which is due this week, but we understand that it is far from friendly.

The Turpentine-market.

CONSIDERABLE interest has been aroused in the United States by the decision of the National Turpentine Operators' Association to curtail the production of turpentine for the coming year by 10 per cent., and it is stated that owing to the extremely high prices now prevailing, New York dealers and paint-manufacturers are at their wits' end as to what course to take in order to combat the Association. The general opinion among them is that the few large operators who control the situation are merely seeking a pretext for an abnormal advance in prices, and many fear that the present move is only a precursor of a series of squeezes and corners which will be engineered successfully whenever the producers desire. Reprisals are threatened by the New York paint-trade, and endeavours are being made to interest the Standard Oil Company in the manufacture of turpentine and so oppose the tactics of the Asso-

ciation, but whether the Standard Oil Company will enter into conflict with the Association is a matter of conjecture. The Turpentine Operators' Association was formed about three years ago, and since then the market has been thoroughly under its control. At the annual convention of the members at Jacksonville, Florida, on September 14, 600 delegates being present, they decided to curtail the naval-stores output for 1905 by 10 per cent. According to the brief reports which leaked out, the proceedings were characterised by harmony and unanimity, and in making the case good for the reduced output the Association appear to have been actuated by the fact that the high prices of timber, the demoralised labour conditions, and the increased cost of such supplies as are used in the production and manufacture of naval stores, necessitated them holding out for high prices. On account of the depressed condition of the lumber-market, many millpeople (says the committee's report) are turning their attention to the manufacture of turpentine and resin, thus adding to the supply made by the regular operators. The Association appears to hold together well, and each operator pledged himself to aid and assist the committee in carrying out the purposes of the resolutions.

The effect of the Association's arrangements is already beginning to be felt on the London market, and values during the past few days have had a sharp advance, but with a pressure to sell in some quarters there was a decline of 4½d. per cwt. on Tuesday, the spot value of American dropping from 39s. 10½d. to 39s. 6d. on that day. American turpentine has been at a comparatively high price for many months past, and this fact has led users to pay attention to substitutes, which, however, cannot entirely take the place of the American product. We understand that Russian turpentine has given fairly good results, but the chief objection to it hitherto has been its bad odour. Means have, however, been adopted to render it odourless and water-white, so that in the event of a considerable advance in the price of American, the Russian product will no doubt come into more general use. Another substitute which has come forward in largely increasing quantities is turpentine manufactured from pine-refuse, to which we referred in our issue of March 26, 1904, page 494. There are now about a dozen factories making this in the United States, producing what is called "pine turpentine" or "pine-knot turpentine" distilled from pine-wood scraps by a new process. This substitute is finding its way into Britain, where it is sold simply as "turpentine" without indication of its origin, and in some instances it is mixed with genuine turpentine. This and other expedients to combat the machinations of American turpentine-distillers have so far had little effect upon the market, and sooner or later turpentine-users will have to face the same problem that cotton-spinners are now attempting to solve. There are reasons why American turpentine should have taken the position it has, but these ought not to prevent endeavours being made to start or foster turpentine-industries in the North-West Provinces of India, and in some parts of the Australian Continent. The matter is becoming acute, and it would not be premature for our Government Departments to look into it before our manufacturers to whom turpentine is a staple find themselves gripped as hard as our cotton-spinners have been.

Still Onwards.

We are drawing towards our majority as the official organ of bodies connected with pharmacy and the drug-trade of the British Empire. THE CHEMIST AND DRUGGIST is supplied by subscription to the members of nineteen of these at home and abroad, and now the subsidiary journal, "The

Chemist and Druggist of Australasia," has been adopted as the official organ of the Pharmacy Board of New Zealand. This takes us out of our Society teens. The present instance is merely a proof of influence and respect. The Pharmacy Board is an administrative body, whose members already get the *C. & D.* and the *C.D.A.* It is gratifying to us that, so remotely situated as we are from many parts of the Empire, our organisation enables us to keep in touch with all, so that the *C. & D.* is welcomed every week as a friend by many whose only tie to the Old Country is that of business and kinship.

The Glyn-Jones Testimonial.

Next Wednesday, October 5, Mr. W. S. Glyn-Jones, chemist and druggist and barrister-at-law, is to be entertained to dinner at the Hotel Cecil—Mr. R. A. Robinson, President of the Pharmaceutical Society, being in the chair. The occasion is to mark the cessation of Mr. Glyn-Jones's active participation in the retail drug-trade, and by a gift (which will comprise a cheque and other things) to acknowledge the great service which he has done to the chemists and druggists of the British Empire by the system of protecting prices which he inaugurated less than ten years ago. We say the British Empire advisedly, because, though Mr. Glyn-Jones only worked for the United Kingdom, his advice and help have been sought and freely given to our compatriots elsewhere. We make these remarks because we have received a long list of subscribers to the testimonial, with a request from the Executive Committee to print it. That, unfortunately, is impossible in this issue, and we regret that periodic lists have not been sent to us since the matter was inaugurated. Such lists would have been easier to dispose of, and would have helped "the cause." We may mention that the list is merely one of names and addresses, it having been wisely resolved that the amounts given should be kept private. There appear to be over five hundred names in the list, so that there are still a few thousands of chemists in the country who have the opportunity of acknowledging their indebtedness to Mr. Glyn-Jones if they are so disposed. The list is to be kept open until Wednesday morning next, October 5. Contributions do not involve attendance at the dinner, and should be sent, with the signatures of subscribers, to Mr. G. R. Barclay, 95 Farringdon Street, London, E.C., or to Mr. William Johnston, 182 Temple Chambers, Temple Avenue, London, E.C. It is interesting to note that the wholesale houses, with few exceptions, have subscribed; so have all the members of the Councils of the P.A.T.A. and C.D.A. Mr. Glyn-Jones's colleagues on the Pharmaceutical Council, with three provincial exceptions, have also done so. Birmingham, Bradford and Queensbury, Dewsbury, Forfarshire and District, Hastings, Lincoln, Ramsgate, and Whitehaven figure in the list in respect to collective subscriptions. Other chemists' associations preferred that the members' names should appear. We understand that a hundred and thirty tickets for the dinner have been applied for, and it is essential that other chemists who wish to attend should apply to Mr. Barclay or Mr. Johnston by Monday or Tuesday. The *menu* presages a good dinner, and the programme otherwise will make a memorable evening.

VICTORIAN HONEY.—The returns for 1902-3 show that there were 4,402 beekeepers, owning 15,532 frames and 16,594 box hives, and producing 911,691 and 287,640 lbs. of honey respectively, and 23,061 lbs. of beeswax. In 1891-2 the quantity of honey returned was 1,128,283 lbs. After a decline in the next two years the quantity gathered in 1894-5 was 1,323,982 lbs. A further falling-off is recorded from that year to only 195,163 lbs. in 1897-8. A fair recovery has since been made, the return for 1902-3, the third largest, indicating that the industry is now making good progress.

Legal Reports.

Sale of Food and Drugs Acts.

CAMPHORATED OIL.

At the Kensington Petty Sessions on September 27, before Mr. H. B. Halswell (Chairman) and a full bench of magistrates (including Dr. C. H. Bennett, Dr. B. Forman, and Dr. Selldon), William Richard Hoare, chemist and druggist, 199 Portobello Road, Notting Hill, W., was summoned, at the instance of the local Borough Council, for selling as camphorated oil an article not of the nature, substance, and quality demanded.

Mr. F. Whitwham appeared for the Council, and Mr. C. H. Kirby (of Neve, Beck & Kirby) was instructed by the Chemists' Defence Association for the defendant.

The purchase having been proved, the certificate of Mr. C. E. Cassal, the borough analyst, was put in, which stated that the article contained 83.68 per cent. of olive oil, and 16.32 per cent. of camphor—"there being," ran the certificate, "a deficiency of 23.66 per cent. of the camphor which should have been present according to the requirements of the British Pharmacopœia, and it was therefore adulterated contrary to the provisions of Section 6 of the Sale of Food and Drugs Act, 1875."

Mr. Kirby, in opening the defence, submitted that in fact no offence had been committed. He would call the manager of the shop, who actually made the preparation, and who would depose that the camphorated oil was made exactly in accordance with the directions of the British Pharmacopœia. That fact he considered a sufficient answer to the charge. There is no direction or statement in the Pharmacopœia as to the quantity of camphor to be found in the finished product. The case was exactly similar to that of "Hudson v. Bridge," in which it was decided by the King's Bench Division that magistrates were wrong in convicting for an alleged deficiency of acetic acid in vinegar of squill.

Dr. Forman (magistrate): What do you suggest became of the camphor in this case?

Mr. Kirby: I say that it evaporated.

Dr. Forman: Evaporated from the oil? I can understand the camphor evaporating in the case of spirit of camphor but not when the camphor is dissolved in oil. In the case of vinegar of squill there is a mixture of vinegar and honey and you get a different article altogether, so that the case quoted is scarcely analogous.

Mr. Kirby: I think your Worship must be under some misunderstanding regarding the evaporation of camphorated oil as well as regarding the composition of vinegar of squill. The British Pharmacopœia says that vinegar of squill is made with squill and acetic acid; there is no honey in the article at all.

Dr. Forman: Don't you mean oxymel of squill? Oh, I beg your pardon; I was wrong on that point. But I stick to the doubt about evaporation of camphor from oil, and in that contention I am supported by my medical colleague [Dr. Bennett].

Mr. Kirby said he was quite prepared to call evidence on the point, and Mr. Whitwham suggested that Mr. Cassal should be put in the witness-box. Mr. Kirby objected to the prosecution reopening their case after it had been closed, and in reply to the Chairman said his contention was that there was no standard for camphorated oil at the time it was sold. If the defendant had made the camphorated oil in the manner prescribed by the Pharmacopœia he had fulfilled all that the law required.

Mr. C. Pascall (magistrate): I understand your meaning to be that if a tradesman keeps the oil for, say, two years, and then sells it with no camphor at all in it, the purchaser is not prejudiced?

Mr. Kirby: I do not say that.

The Chairman: There is no question of adulteration here, but I suppose the oil was kept too long, and that the camphor evaporated.

Mr. Kirby: But are you going to convict a man of a criminal offence when he has done all that the Pharmacopœia directs?

The Chairman: We have to consider the public.

Mr. Kirby: But, sir, I submit that you are not to consider the public only.

The Chairman: And we have to carry out the law. Mr. Kirby said the question was whether the Pharmacopœia was complete as to its directions for making camphorated oil. If it directed that the oil should be sold with a certain percentage of camphor, the case would have been different. In the case of sweet spirit of nitre, for instance, a definite standard was given, but not so with camphorated oil or vinegar of squill.

William Edward Meats, chemist and druggist, formerly manager for the defendant, deposed to making the camphorated oil in strict accordance with the directions of the Pharmacopœia.

William Johnston, pharmaceutical chemist, 23 St. Lawrence Road, Brixton, deposed to the liability of camphorated oil to evaporate in certain temperatures. He had examined the stopper of the bottle used in the case under consideration, and he was distinctly of opinion that the 23.66 per cent. of camphor might easily have evaporated.

In spite of the protest of Mr. Kirby, the public analyst, Mr. Cassal, was afterwards put in the box. He said it was quite impossible for the amount of camphor to be lost as shown in this case by ordinary evaporation.

Cross-examined by Mr. Kirby, witness admitted that he had never made camphorated oil for commercial purposes. He had experimented on the evaporation of camphorated oil, and had found that after exposing some in an uncorked bottle for thirty-three days the loss of camphor was less than 0.1 per cent.

Mr. Kirby submitted that Mr. Cassal had told them all he knew about the matter from an analytical point of view; he knew nothing of the commercial side of the question.

The Chairman: The question is whether the purchaser got what he asked for.

Mr. Kirby: There is no proof that the standard taken by the public analyst has any foundation in law at all. I submit that there is no such standard, and that the purchaser got what he was entitled to—he got camphorated oil.

The medical men on the bench were unanimous in thinking that a clear case had been proved against the defendant, and

The Chairman, after consulting his other colleagues, said: We think that sufficient care has not been exercised by the defendant or his manager in this case, in making or keeping this camphorated oil; and, of course, the public must be protected. There must be a fine of 40s. as a warning to other chemists. To this was added 10s. 6d. costs.

SWEET SPIRIT OF NITRE.

At St. Albans, on September 17, George Reuben Bingham, grocer, Harpenden, was fined 1*l.*, including costs, for selling sweet spirit of nitre which was certified by Mr. A. E. Ekins, the county analyst, to be 76 per cent. deficient in ethyl nitrite.

SALICYLIC ACID IN GINGER-WINE.

The appeal, William Donnan, York Street, Belfast, v. the City Corporation food and drug inspector, was decided by the Recorder of Belfast on September 24. Donnan had been fined 20s. by the Magistrates for selling ginger-wine containing 7.2 grains per pint of salicylic acid, and against that decision appealed. Mr. McGrath, K.C., and Mr. Smith, B.L., were for appellant, and Mr. Lewis for respondent.

For the prosecution Mr. Robert Barklie, city analyst, proved the analysis, and said as a chemist he believed salicylic acid to be a dangerous drug. The sample contained 12.2 per cent. of alcohol, which was sufficient as a preservative without salicylic acid. Dr. Henry O'Neill swore that the drug was dangerous, especially when given in any quantity, to persons suffering from inflammation of the heart, liver, or kidneys. Drs. Torrants and S. E. Coates gave similar evidence.

For the appellant counsel submitted that salicylic acid in the quantity contained in this ginger-wine was not injurious to health, and was necessary for the production and preservation of the wine. He also relied on the decision in "Craig v. Corrigan," a Tyrone case, where Sir Francis Brady, the Judge, on appeal had reversed the conviction of the Justices.

Mr. Charles Huxtable, pharmaceutical and analytical

chemist, Dublin, called for the appellant, said that salicylic acid in the proportion of 7.2 grains per pint in absolutely harmless. He had found that less than 7.2 grains per pint is not effective as a preservative.—Sir William Whitla, M.D., said it is not unusual to give 120 grains of salicylic acid in a day, and he did not believe the drug hurtful in small quantities. Cross examined: In books one would constantly find statements about salicylic acid and its effects on the heart and kidneys, but at the time those books were written it was almost impossible to get the drug pure; now it is almost impossible to get an impure specimen. The heart-depression is produced by impurities, and not by the acid.—Mr. Lewis quoted the evidence of Dr. J. S. Cameron, Professor Caulfield, Dr. E. H. Starling, Dr. McLagan, Dr. Stevenson, and others to show that the drug was considered dangerous as a constituent of food.—Dr. A. Montgomery agreed with the evidence of Sir William Whitla as to the harmlessness of the acid.

The Recorder, in giving his decision, reviewed the evidence, and said the question appeared to resolve itself into this: Is salicylic acid necessary or required in the manufacture of the wine, as there is a doubt in the matter as to its being injurious? Ginger-wine had existed long before salicylic acid was introduced into it at all. Is it better now than it was then? He (the Recorder) did not know, but certainly, having existed for so long a time before this, he did not see how it is now required, and if it is not required it appeared to him it ought not to be introduced into the wine. He therefore affirmed the decision of the Magistrates.

CREAM OF TARTAR.

At Hungerford Police Court on September 28, before Dr. J. B. Morris and other justices, Henry Savage, of Froxfield, was summoned for selling cream of tartar containing $\frac{3}{4}$ grain of lead per lb. Mr. H. Bevir prosecuted for the Wilts County Council, and Mr. F. W. Beck (of Messrs. Neve, Beck & Kirby, 21 Lime Street, London) defended. It was proved that four penny packets had been purchased, mixed, and divided into three parts. Dr. Bernard Dyer, the county analyst, gave evidence as to his analysis. Mr. Beck, for the defence, said the cream of tartar had been sold in the same condition in which it had been received. He contended that in dividing the purchase the Act had not been complied with. Each packet of cream of tartar was a separate article and formed a separate purchase, and in support of this contention quoted the judgment of Mr. Justice Darling in the case of "Mason v. Cowdary." The Bench upheld the objection and dismissed the case.

Dentists Act.

THE GLASGOW PROSECUTION.

In the Glasgow Sheriff Court on September 28, Sheriff Boyd gave judgment on the questions of relevancy debated before him recently (see *C. & D.*, September 24, page 532) in a complaint at the instance of the Registered Dentists' Protection Association of Scotland (Limited), Glasgow, against Oscar Farkasch, proprietor of the Hygienic Institute. Respondent's counsel contended that the complaint was irrelevant on two grounds—(1) that complainers had no title to sue, and (2) that the first of the two specified contraventions was not according to fact.

The Sheriff upheld the second objection, but dismissed the first, and sent the case to proof. His Lordship held that the institutional writers on Scotch law made it clear that a private person complaining must state the injury that he has received, and thus show interest; but this, he thought, had been modified by the Medical Act, 1886, Section 26, which says that a prosecution for any offence mentioned in Section 4 of the Dentists Act may be instituted by a private person. The definition-clause of that Act provides that "a person" could be a person corporate or incorporate. He thought that the complaint here was one that was included under Section 4 of the Dentists Act. It had been argued that the word "person" must be regarded in Scotland differently from England. In England a private person may sue a company without interest, but in Scotland that is not so. It was further argued that the provision in Section 26 of the Medical Act must be taken to mean that such a prosecution may be instituted by a private person who at the same time stated

a relevant interest. His Lordship did not agree with these views. He thought this was a condition which the Act did not provide. He thought it was intended that the practise in England and Scotland should be identical.

Respondent pleaded not guilty, and the case was adjourned for proof till October 18.

Bankruptcies and Failures.

Re PERCY HAROLD CRAGE, late of 27a St. Mary-at-Hill and elsewhere, trading as "S. Overall, Son & Co.," Fish and Cod-liver Oil Merchant.—This debtor was publicly examined on September 27 at the London Bankruptcy Court, the accounts showing total liabilities 2,284 $\frac{1}{2}$. 19s. 8d. (unsecured 2,068 $\frac{1}{2}$. 14s. 10d.) and assets 143 $\frac{1}{2}$. 15s. 5d.

Re JOHN TAYLOR LEIGHTON, lately carrying on business at 20 Picardy Place, Edinburgh, Manufacturing Chemist. The examination of this debtor took place in the Edinburgh Sheriff Court-house on September 27. Creditors will meet in the chambers of Mr. J. Stuart Gowans, 33 Charlotte Square, Edinburgh, on October 6, at three o'clock.

Re W. D. O'REGAN, formerly of 15 Bridge Street, Tralee, now of Castleisland, co. Kerry, chemist.—Debtor was adjudged a bankrupt on September 15. Meetings will be held at the Bankruptcy Buildings, Four Courts, Dublin, on October 11 and 25, at 11 A.M.

Re ROBERT HILL, 16 Haven Green, Ealing, Patent-medicine Vendor's Assistant.—The debtor has filed a statement of affairs showing unsecured liabilities 280 $\frac{1}{2}$. 9s. 1d. and no assets. The first meeting of creditors was held on September 24 at the offices of the Official Receiver, 14 Bedford Row, W.C., when the matter was left in the hands of the Official Receiver to wind up. That official, in his observations, states that the debtor says he has never been engaged in business on his own account, but for the last thirty-four years he has been in the employ of a patent-medicine vendor in New Oxford Street, W.C., and that for several years past his salary has been 4 $\frac{1}{2}$. 4s. per week. The debtor admits that he has been insolvent for several years past. He attributes his position to household and personal expenses in excess of income, and to the payment of heavy interest on loans. A "deficiency account" has been furnished.

Re ALEXANDER FORBES HENDERSON ALLAN, trading as Forbes, Allan & Co., Limited, 199 Upper Thames Street, E.C., Wholesale Chemist.—This debtor, who filed his own petition, started business on his own account some three years ago, having for eleven years previously been in the employ of Parke's Drug-stores. The first meeting of his creditors was held on September 29, at the London Bankruptcy Court, when it was stated that the failure was brought about by a loss of 550 $\frac{1}{2}$. sustained through a fire at the business premises, which were under-insured. He now owed about 400 $\frac{1}{2}$, and had in the shape of assets stock valued by him at 270 $\frac{1}{2}$, but by the court valuers at only 100 $\frac{1}{2}$. In the absence of any offer the case was left with the Official Receiver to be wound up in bankruptcy. The trade creditors include Weiner Schwob & Co., Paris, 371 $\frac{1}{2}$; R. Addis & Son, 40 $\frac{1}{2}$. 3s. 4d.; A. Hann, Germany, 75 $\frac{1}{2}$; Muller & Kemhert, Germany, 46 $\frac{1}{2}$; and the British Xylonite Company, 16 $\frac{1}{2}$.

Re HENRY WINSTANLEY WHITELOCK, late of Market Place, Romford, Chemist. The adjourned first meeting of creditors was held on September 28 at the London Bankruptcy Court, before Mr. Egerton S. Grey, Official Receiver. A statement of affairs has now been filed, showing liabilities 1,014 $\frac{1}{2}$. 14s. and no available assets. The debtor stated that he sold the business for 400 $\frac{1}{2}$, from which he paid to his father 200 $\frac{1}{2}$ previously borrowed to enable him to pay a composition to the creditors. He also repaid a loan to a distant relative. The Chairman directed the debtor to file an account showing the disposal of the 400 $\frac{1}{2}$, and intimated that the whole circumstances would be inquired into at the public examination, which was fixed for November 1. The case was left in the hands of the Official Receiver to be wound up in bankruptcy. Appended is a list of the principal creditors, viz.:

	£ s. d.
Dawson, J., Ilford	25 0 0
Godbold, Mrs. D. B.	150 0 0
Kirkwood, J.	82 0 0
Roberts, J. R. (Limited)	18 14 3
Sutton & Co.	83 12 1
Sydney & Co.	32 0 0
Whitelock, J.	550 0 0

Fully Secured Creditors.

Equitable Investment Co. (Limited) ... 50 0 0

Re JAMES HULLAND, Market Hill, Framlingham, Chemist and Druggist.—Debtor appeared for his public examination at the Ipswich Bankruptcy Court, on September 23, before the Registrar, Mr. L. J. V. Amos. Particulars of affairs were

detailed in THE CHEMIST & DRUGGIST of September 10 (page 464). The creditors include:

	£ s. d.
Aviss Brothers, Coventry	10 0 0
Baiss Brothers & Stevenson (Limited), London	15 0 0
Barclay & Co. (Limited), London	27 0 0
Gall, A., chemist, Woodbridge	13 0 0
Hulland, R., Bath	500 0 0
Hulland, Mrs. Agnes	100 0 0
Hulland, Miss E.	84 0 0
Rowland, R. H., Woodbridge	22 0 0
Wise, Wm., Midsomer Norton, Bath	125 0 0
Wyleys (Limited), Coventry	29 0 0

Examined by the Official Receiver, debtor said his money had gone in "general expenses." The Registrar said the Court must have something more definite than that. Debtor would not admit the suggestion that he must have been losing money at the rate of about 100*l.* a year for the last thirteen or fourteen years. He pointed out that his father was returned as a creditor for 500*l.*, and that 400*l.* of this was the sum originally paid for the business which he (the debtor) took over from his brother. He took the business and the liability upon it. The Registrar: But you never paid any part of that? Debtor: No, sir. He added that he had paid interest on the money though not for some years, and that the business was certainly not a gift to him. He admitted that he knew he had been insolvent for some years, and that his liability to Mr. Wise, of Bath, had been contracted within the last two years. He did not think Mr. Wise would have lent him the money if he had known what his position was. In answer to other questions debtor said he had paid no rent for four years, and the owner of the place had lent him 200*l.* besides. Nothing of further importance was elicited, and in adjourning the examination the Registrar said: "You will have to explain what you have done with the money. You must know what you have done with it, and you will be good enough to prepare a statement for the information of the Court."

Gazette.

Partnerships Dissolved.

Goldsbrough, G. F., and Watkins, F. A., under the style of Goldsbrough & Watkins, Churchside, Herne Hill, S.E., Surgeons and physicians.

Mitton, T. J., Wade, B., the elder, and **Wade, B.**, the younger, under the style of Mitton, Wade & Co., Cheadle, Cheshire, manufacturers of cattle foods and medicines.

The Bankruptcy Acts, 1883 and 1890.

RECEIVING ORDERS.

Trueman, Harry Allen, and Britt, James Daniel (lately trading under the style of the Favourite Co.), Neath, Glamorgan, aerated-water manufacturers.

ADJUDICATIONS.

Dale, Frederick William, Bradford, chemist's assistant.

Flinn, Harry (carrying on business under the style of Flinn & Co.), Herne Bay, Kent, brewer and mineral-water manufacturer.

Saunders, John Frank, Winchmore Hill, Middlesex, lately St. John's Hill, Wandsworth, S.W., chemist.

New Companies & Company News.

COUNTY MINERAL-WATER COMPANY, BLACKPOOL (LIMITED).—Capital 5,000*l.*, in 1*l.* shares. The first directors are W. Kenyon and R. Kenyon. Registered office, 26 Birley Street, Blackpool.

DURHAM COUNTY CHEMISTS (LIMITED).—Capital 2,000*l.*, in 1*l.* shares. Objects: To carry on the business of chemists, druggists, drysalters, distillers, Italian warehousemen, refiners, oil and colour men, dealers in pharmaceutical, medicinal, chemical, industrial, and other preparations and articles, etc. The first subscribers are: W. H. Rowell, Great Grimsby; R. H. Rowell, T. Rowell, Mrs. I. M. Rowell, Miss B. Rowell, and Miss M. Rowell, Houghton-le-Springs, co. Durham; and J. G. Johnson, Hetton-le-Hole, co. Durham, chemist's assistant. The first directors are R. H. Rowell, W. H. Rowell, and T. Rowell. Registered office, 11 Sunderland Street, Houghton-le-Springs, co. Durham.

MARIO McNALLY & CO. (LIMITED).—Registered in Dublin. Capital 500*l.*, in 1*l.* shares. Objects: To carry on the business of wholesale, manufacturing, retail, and general chemists and druggists, pharmacists, analysts, herbalists, opticians, etc. The first subscribers are: W. Brophy, 8 Burgh Quay, Dublin, eor, and flour merchant; G. T. Nagh, 7 Meath Street, Dublin, pharmaceutical chemist; G. Smyth, 196 Great Brunswick Street, Dublin, ecclesiastical and monumental sculptor;

W. H. Lodge, 5 Effra Road, Rathmines, Dublin, clerk; Mario McNally, 109 Strand Road, Sandymount, Dublin, druggists' assistant; R. S. Jackson, 62 Lower Gardiner Street, Dublin, public accountant; and J. O'Sullivan, 70 Lower Gardiner Street, Dublin, L.R.C.S.E., etc. The first directors are Mario McNally, G. Smyth, and W. Brophy; qualification 5*l.*

EVANS SONS LESCHER & WEBB (LIMITED).—The warrants for dividends on preference shares in this company were posted on September 30.

GERMAN SOLVAY WORKS COMPANY (Birnburg).—The capital is to be increased from 500,000*l.* to 2,000,000*l.* in ordinary shares, so as to buy out 10,000 preference shares.

MEISTER, LUCIUS & BRUNING.—This company is amalgamating with Leopold Cassella & Co., of Frankfort, with which it has long been closely associated. The object of amalgamation is to establish a community of interests by an interchange of shares and of directors, so that the two enterprises will be placed practically under the same control. The capital of the Höchst Company, which at present amounts to 1,000,000*l.*, is to be increased to 1,275,000*l.*, and the additional sum of 275,000*l.* is to be exchanged for equivalent shares in L. Cassella & Co., which is to be converted into a limited company with a share capital of 1,000,000*l.* and a bond issue of 500,000*l.*

East Indian News.

THE DEHRA BRANCH of the business of Mrs. P. A. Keogh, of Mussoorie, has been sold to Messrs. F. Roberts & Co.

BACTERIOLOGY IN INDIA.—The Government of India are about to start a bacteriological laboratory at Kasauli. The Central Committee of the Pasteur Institute of India have agreed to place Banbir Villa, the gift of a native chief, at the disposal of the Government free of rent for this purpose. The committee expect that the Government will undertake to keep the building in repair and be responsible for any additions it may be found necessary to carry out.

AN AGUE-MIXTURE LABEL.—In the Bombay High Court on August 29, Mr. Justice Russell disposed of the suit in which Hormasjee Limjibhoy Batiwala sued Abdulabhai Mullan Alabax Attarwala in respect of colourable imitations of labels, wrappers, the whole get-up, and packing of plaintiff's "ague-mixture" of Tin Chhap, which had acquired a reputation for twenty-three years past, and prayed that the defendant and his agents might be restrained from selling the imitation article, designated as "Tin Chhap Fever-mixture." A decree was granted in the terms asked for.

INDIAN TURPENTINE.—On several occasions we have referred to the condition of the turpentine-industry in India, and in view of the continued high prices for American turpentine it may be appropriate to glance at the conditions now prevailing. So far as can be ascertained, the industry is and has been in a nascent state. There is one still in the Punjab worked by the Indian Government, and last year it produced a gross return of Rs. 28,739, against working-expenses Rs. 11,819. The other still in the Central Provinces does not seem to have been so fortunate, balance over expenses being only Rs. 4,467, but the result is sufficiently good to prove that the turpentine-industry can be established in this part of India.

ANILINE AND ALIZARINE DYES IN INDIA.—According to the "Indian Agriculturist," the imports of aniline and alizarine dyes into India during 1903 were unusually heavy, and surpassed those of any previous year. The quantity of 12,182,600 lbs. is one-third as much again as in 1902-3, but owing to a considerable fall in the average price of aniline dyes the value, Rs. 82,67,610, was only 26 per cent. higher. The prices of the cheaper alizarine dyes show a very slight decline, and with an increase of nearly 39 per cent. the quantity imported exceeded that of aniline dyes by 1,216,000 lbs. About four-fifths of the trade is with Bombay, and almost the same proportion is recorded as the joint share of Belgium and Holland; but most of this comes through those countries in transit from Germany, which exported to India in 1902 2,198,000 kilos. of alizarine, valued at 2,990,900*m.*, and 1,214,800 kilos. of aniline and other coal-tar dye, valued at 3,766,000*m.* This accounts for practically the whole of the alizarine and about 60 per cent. of the aniline.

Trade Notes.

THE CROWN PERFUMERY COMPANY, Hometon, N.E., and 108 Fore Street, E.C., have issued a list of Christmas novelties, which will be sent to any of our subscribers on request.

"OUR TOWN TRAVELLER" last week erroneously appended the word "Limited" after Messrs. Thomas Christy & Co.'s designation. Mr. Christy and his partners have not limited their enterprise in any way.

"TABLOID" QUININE AND STRYCHNINE.—Messrs. Burroughs Wellcome & Co. are issuing these in bottles of twenty-five and 100. Each contains quinine bisulphate 1 grain and strychnine sulphate one-sixtieth grain.

LISTED.—The following have been added to the P.A.T.A. protected list during the month of September: "Blinblow" asthma powder and cigarettes, Breidenbach's perfumes, "Febrilene," Freeman's veterinary preparations, "Pai-Liu," "Pilikins," and Robbins's B.B. syrup of glycerophosphates.

JEYES' SANITARY COMPOUNDS COMPANY (LIMITED) have sent to members of Parliament their views on the "Standardisation of Disinfectants" as one of the delinquent parties referred to in the letter of the Chairman of the Sanitas Company (Limited). They wholly disagree with Mr. Kingzett's debateable arguments, which form part of the question which has been referred by the Sanitary Institute to a committee of eminent scientists, and say they will prefer to be guided by their conclusions, a course which they commend to members of Parliament.

"PALATINOIDS" AT THE ANTARCTIC.—Messrs. Oppenheimer, Son & Co. (Limited), 179 Queen Victoria Street, E.C., supplied the *Discovery* Antarctic exploration party with a medicine-case which Dr. Reginald Koettlitz, the medical officer, kept with him upon all sledge expeditions. From a letter sent to them by the doctor it appears that the palatinoids in the case were subjected to a temperature of -52° F. (84 degrees of frost), and on the return to Europe were kept in a cabin through the Tropics, the temperature often being between 80° and 90° F. The palatinoids are still in perfect order and condition, and this also applies to the contents.

DEVELOPING-TANK.—Messrs. Houghtons (Limited), 88 and 89 High Holborn, W.C., have placed on the market the "Standa" developing-tank for the daylight development of plates. The tank is the same shape as an upright fixing-tank, and has an inner tank into which the twelve plates are placed. The plates are filled into the inner tank in the dark-room or changing-bag, but the subsequent operations may take place in daylight. Developing takes six minutes, and the fixing and washing which follow do not necessitate the removal of the plates from the tank. The quarter-plate size sells at 3s. 6d., half-plate 5s. 6d., whole-plate 7s. 6d.

WINTER-TIME PASTILLES.—This is the name which Messrs. Robert Gibson & Sons (Limited), Carlton Works, Hulme, Manchester, have given to an excellent new pastille for bronchial troubles, which they are introducing this winter. In flavour and effect the pastilles seem to combine the properties of chlorodyne, anise, and some expectorant, and they are pleasant to taste and to look upon. The pastilles are put up in 7-lb. boxes (1s. per lb.), 4-lb. bottles (1s. 1d. per lb.), and 4-lb. jars (1s. 2d. per lb.), the last being especially adapted for counter-show, as each jar has a shield-shaped gold label. It will be noted that the name of the pastille does not bring retailers into trouble under the Medicine-stamp Acts.

"Isco" is the brand which Messrs. Isaac Spencer & Co., of Aberdeen and Stoneferry, Hull, have given to their medicinal non-freezing cod-liver oil manufactured by them in this country. It is a well-known fact that when cod-liver oil was first introduced as a therapeutic agent leading pharmacists in Great Britain made the oil themselves, thus ensuring that cod-livers alone were employed, and that the process of manufacture was conducted under the best conditions to ensure the production of a pale oil. What Messrs. Isaac Spencer & Co. are doing is exactly that on a large scale. Our East Coast fisheries give us an abundant supply

of cod, and Messrs. Spencer get them when they are landed from the boats, and promptly render the livers into oil, subjecting it afterwards to the low temperature necessary to separate crystallisable stearin. The result is a remarkably pale and almost odourless oil, which is certified by Mr. E. J. Parry, B.Sc., to correspond to the requirements of the British Pharmacopœia, 1898, while it satisfies a more stringent freezing-test than that laid down by the B.P. Now that the winter season is approaching and stocks of cod-liver oil are wanted, we commend this oil to our readers for its own sake, apart altogether from the idea of encouraging home industries. The firm will furnish samples and prices on application.

Business Changes.

BAILEY'S DRUG-STORES have been opened at 19 Flora Street, Plymouth.

MESSRS. F. C. DEVON & CO., 22 Fenchurch Street, E.C., are removing to 5 Great Tower Street.

The firm Johann Maria Farina gegenüber dem Augustiner Platz, Cologne, is dissolved.—*Kolnische Zeitung*.

MESSRS. A. & G. FISCHER, drug-merchants and exporters, have removed to 22 and 23 Great Tower Street, E.C.

The business of Mr. Thomas Keating has been removed from Bride Lane, E.C., to new premises at 50 and 52 Union Street, Borough, S.E.

MR. GRIFFITHS HUGHES, pharmaceutical chemist, Victoria Street and Cateaton Street, Manchester, has opened 17 Deansgate as a pharmacy.

MESSRS. STOKES & CO. (LIMITED), chemists, of Edgcumbe Place, Stoke, Devonport, have opened large drug-stores in Union Street, Plymouth.

MR. W. J. MORLEY, chemist and druggist, St. Helier's, Jersey, has acquired the business at 76 New Street, Jersey, formerly carried on by Mr. Robert Inglis.

MR. BENNEY, chemist and druggist, formerly manager for Messrs. Wilmer & Co., chemists, Falmouth, has taken over the business at 40 Market Street, Falmouth, lately belonging to Mr. W. H. Solomon, chemist and dentist.

MR. L. R. DAVIES, chemist and druggist, lately manager of Ford's Drug-stores, Forest Gate, E., has purchased the business of Mr. F. Grover, chemist and druggist, at Crofton Park, S.E.

Personalities.

MR. M. A. J. NOBLE, of Bombay, sailed by the s.s. *Levanzo*, on September 15, on a visit to London and the United States.

MR. T. WATSON THOMASON, of Brisbane, sailed by the *Majestic* on Wednesday. He will travel by the C.P.R. to Vancouver, where he expects to join the *Aorangi* for Brisbane on October 14.

DR. J. T. C. NASH, medical officer of health, Southend-on-Sea, communicated a paper to the "Lancet" last week showing that epidemic summer diarrhoea is largely due to flies conveying the infection to food.

MR. ALEC D. ROBERTSON, son of Mr. Alex. Robertson, of the Oban Chemical-works, sailed from Liverpool on Thursday, September 29, by the *Orila*, on a business trip to South America. His proposed itinerary covers parts of Brazil, Uruguay, Argentina, and Chili, in which countries the firm have agencies.

The Holborn Board of Guardians on Wednesday increased the salary of Mr. Norman Colbeck, dispenser, from 120/- to 140/- per annum. Mr. Colbeck has been awarded a gratuity of 10/- for each of the past three years, because the Local Government Board had declined to sanction his salary being increased until he had been in the Guardians' service three years.

MR. THOMAS HEIGHINGTON, chemist and druggist, manager of the drug department of Harrod's Stores, has just had a romantic stroke of fortune. An advertisement recently appeared in the "Times" and other news-

papers in regard to the children of Mr. Thomas Heighington and his wife, Emily Elizabeth Pitt. Mr. Heighington happened to be in Germany when the advertisement appeared, and on returning found a big pile of letters to answer about the matter. He is the only son of the marriage, and has a sister. The romance of the matter lies in the fact that his father, a sugar-planter in the West Indies, married his mother when she was a ward in Chancery, and her money has been in the Court of Chancery of the County Palatine of Lancaster for at least fifty years. Mr. Heighington was sent to England before he was three years old, and was brought up by an uncle. After his father's death, when he was a child, his mother married again, so that he has not seen her since he was a boy, and it is now assumed that she is dead. Mr. Heighington is the only male Heighington in England. The family goes back to Sir William Heighington, Bart., of Heighington, co. Durham, who built the parish church there over a century ago. Mr. Heighington and his sister will now share their mother's fortune, the amount of which has not yet been ascertained.

Births.

ROPER.—At 34 Tavistock Road, Plymouth, on September 25, the wife of Robert Francis Roper, pharmaceutical chemist, of a son.

Woods.—At 44 Torrington Place, Plymouth, on September 21, the wife of William Herbert Woods, pharmaceutical chemist, of a son.

Marriages.

HOLYOAKE-HANNAM.—At St. George's, Bloomsbury, on September 23, by the Rev. R. B. Tallinton, Vicar, assisted by the Rev. W. Abel Turner (formerly Rector of Mackay, Queensland), William W. Holyoake, J.P., chemist, Mackay, Queensland, to Kate Fitzwilliam Hannam, of Brisbane.

SHAW-WOOD.—On September 19, at Arksey Church, by the Rev. A. E. B. Wade, Henry Woolhouse Shaw, chemist and druggist, Doncaster, to Florence Mary, eldest daughter of Mr. John Wood, Westfield, Arksey.

Deaths.

FINSEN.—At Copenhagen, on September 24, Professor Niels Finsen, M.D., aged forty-three. This distinguished Danish physician was the introducer of the cure of lupus and other tubercular diseases of the skin by means of the concentrated ultra-violet light-rays of the electric arc, for which last year he was awarded the Nobel medicine prize. He was a remarkable man, for he was practically an invalid all his days, suffering among other things from rheumatic arthritis, and cardiac and liver disorders; even when he graduated at Copenhagen University in 1890 there was no hope of his practising. His name first became known to the medical world outside Denmark by his advocacy of the red-light treatment of smallpox. This was in 1893, and although a revival of an old "superstition," he demonstrated the truth of tradition. In 1895 he proved the utility of the ultra-violet rays in the treatment of lupus, and a visit which Queen Alexandra paid to his Medicinske Lysin institute in 1896 made her an enthusiast about the treatment. Through her influence, and at her own expense, a complete installation of the apparatus was placed in the London Hospital. When Professor Finsen received the Nobel prize (which he gave to benefit medical education and research) he told the "Times" correspondent that he got the prize then because it would be too late this year.

HIPKINS.—At Princes End, Coseley, on September 24, Mr. William Disney Hipkins, chemist and druggist. Mr. Hipkins, who had been suffering from insomnia and mental depression for some time, committed suicide with prussic acid. He was very well known throughout the district, having taken an active part in public affairs. He was for

a considerable period a member of the old Sedgley School Board, and was a member of the Coseley Education Committee.

MELVILLE-BERGHEIM.—At 23 Lancaster Road, Belsize Park, N.W., on September 26, Mr. Samuel Melville-Bergheim, managing director of Plasmon (Limited), aged fifty-seven. Mr. Melville-Bergheim's connection with the drug-trade dates back to the middle of the 'eighties, when he introduced on the English market what was known as the pine treatment, embodying a series of preparations from *Pinus pumilio*—including the essential oil and an extract from the leaves. Later he introduced "Pepsalia," and the intimate knowledge he acquired of medical practice and the drug-trade enabled him a few years ago to take up the sale of "Plasmon," which he and a relative acquired, and this has been put before the public in such a manner that plasmon is now a recognised and established dietetic product. Mr. Melville-Bergheim had a large circle of friends who were devoted to him, and who had a high regard for his character. We understand that the cause of death was heart-failure. Mr. Melville-Bergheim attended the board-meeting of his company on Thursday of last week, apparently in the best of health, but that evening he had a little heart-pain, which was rather alarming. He recovered somewhat next day, but on Monday more serious symptoms came on, and he sank. He leaves a widow and three children.

RAE.—Suddenly, at 15 Avenham Lane, Preston, on September 27, Mr. James Rae, chemist and druggist.

Recent Wills.

CARGILL.—The personal estate of Mr. David Sime Cargill, of Carruthers, Renfrewshire, and of 9 Park Terrace, Glasgow, a member of the firm of Messrs. William Milne & Co., East India merchants, and of Messrs. Cargill & Co. (Limited), chemists and druggists, Colombo, Ceylon, who died on May 25, aged seventy-eight years, has been valued at 929,190*l.*

FITCH.—Probate of the will of the late Mr. John Robert Fitch, retired chemist, of the Woodlands, Higham, Norwich, who died on February 22, has been granted to his widow, Mrs. Jessie Fitch, and Mr. Peter Edward Hansell, of Norwich, solicitor. The gross amount of the estate is 15,733*l.* 16*s.* 6*d.*, and the net personality 15,393*l.* 7*s.* 5*d.*

KEITH.—Mr. Alfred George Keith, of New Street, Kintore, chemist and druggist, who died on May 26, left personal estate valued at 1,661*l.* 15*s.* 6*d.*

KIRKHAM.—The will of the late Mr. Thomas Kirkham, chemist and druggist (the oldest tradesman in Bury St. Edmunds), who died on February 21, 1904, has been proved at the Bury St. Edmunds Probate Registry by his widow, Mrs. Mary Ann Kirkham, of Bury St. Edmunds, and Miss Charlotte Kirkham, of St. Leonards-on-Sea, spinster, the daughter. The gross amount of the estate is 2,822*l.* 0*s.* 3*d.*

PIDGEON.—Probate of the will of the late Mr. John Pidgeon, chemist and druggist, of Ealing, who died on December 8, 1903, has been granted to Kathleen Pidgeon, spinster, by whom the estate was valued at 224*l.* 15*s.* 11*d.*

PRINCE.—The will of the late Alderman Arthur George Prince, chemist and druggist, of Longton, Staffs, who died on February 17, has been proved at the Lichfield Probate Registry by his widow, Mrs. Isabella Ann Prince, of Spratlade House, Longton, Mr. Henry Percival Prince, of Moss House, Uttoxeter, and Mr. Roland Prince, of Longton, pharmaceutical chemist, nephew of the deceased. The gross amount of the estate is 8,208*l.* 11*s.* 9*d.*, and the net personality 5,551*l.* 13*s.* 7*d.*

SCOTT.—The will of the late Mr. Walter Scott, chemist and druggist, of 14 Vine Place, Sunderland, who died on July 13, has been proved at 592*l.* 16*s.* 1*d.* gross, the net personality amounting to 209*l.* 14*s.* 3*d.*

SHAW.—Probate of the will and codicil of the late Mr. George Shaw, Professor of Chemistry at Queen's College, Birmingham, shows that the value of the estate is 248,143*l.* There are no public bequests. Provision is made for his near relatives, and he has left his business books and papers to his assistant, Mr. Richard Skerrett.

WYLDE.—The will of the late Mr. George Wylde, chemist and druggist, who died at his residence, 7 Oxberry Avenue, Fulham, S.W., on March 7, has been proved at the Principal Probate Registry by Mr. John Wylde, chemist and druggist, 12 Bride Lane, E.C., the son, and Miss Alice Harriett Wylde, of 7 Oxberry Avenue, Fulham, spinster, the daughter of the deceased. The gross amount of the estate is 3,563*l.* 7*s.* 5*d.*, and the net personality 867*l.* 17*s.*



TO CORRESPONDENTS.—Please write clearly and concisely on one side of the paper only. All communications should be accompanied by the names and addresses of the writers. If queries are submitted, each should be written on a separate piece of paper. We do not reply to queries by post, and can only answer on subjects of general interest.

The Testing of Quinine Sulphate.

SIR,—If Mr. Howard's letter in this week's CHEMIST AND DRUGGIST was intended to bring about conviction which his previous communication failed to produce, I find that it is equally ineffectual. On the contrary, I am still convinced that the testing of quinine sulphate should be conducted with intelligible regard for the principle of the test relied upon as affording a criterion of the quality of that article for medical and pharmaceutical purposes. That is really the direction in which I have suggested alteration of the official test. In my paper on the subject I endeavoured to show where, and how, the directions given in the British Pharmacopœia fail in that respect; suggesting modifications of detail by which the requisite information may be easily obtained, and stating reasons for the alteration proposed.

Mr. Howard's experimental data, relating to the test of Ph. Ger. II., are even less germane to the question at issue than the conclusions he has drawn from them, and its elucidation cannot be expected by discussing whether quinine sulphate of "good commercial quality" may contain a great deal more than 5 per cent. of einchonidine sulphate, or whether it may also contain "other impurities" more necessary to test for, etc.

BENJAMIN H. PAUL.

Kingston Vale, Putney, S.W., September 24.

Pepsin in Pharmacy.

SIR,—I fear that the claim of Dr. Ellis to be regarded as the discoverer of pepsin is based on a misapprehension. It certainly is noticeable how little reference is found regarding pepsin in the middle of last century. The first account that I can find of its therapeutic use is a report by Corvisart, from Paris, in 1860, that he had found it useful in the vomiting of pregnancy, and Jocelyn reported in 1861 its utility in infantile dyspepsia.

Yours truly,

Dublin, September 24.

JAMES MCWALTER.

That Gold Medal.

SIR,—In your report of the annual meeting in New York on page 532 of your issue of September 24, you state that Professor Remsen received the Barnard medal of Columbia. This is incorrect. Professor Remsen received the medal given by the Society of Chemical Industry; the Barnard medal, or, rather, medals (for there were two), were presented to Lord Rayleigh and Sir William Ramsay.

Yours faithfully,

TOM J. BURTON.

9 Bridge Street, Westminster, S.W., September 26.

[The presentation of the Society's gold medal to Professor Remsen was correctly reported in our issue of September 17. The reference at the dinner to which Mr. Burton alludes appears to have been based on some confusion, as several reports which we have seen mention the Barnard medal, and we gather that this must have been mentioned. Our own impression had been that Professor Remsen had received the Barnard medal also.—EDITOR.]

French Chemicals at St. Louis.

SIR,—As the article you publish from your correspondent at the St. Louis Exhibition under the heading of "France," on page 485 of your issue of September 10, might be misleading, we should esteem it a favour if in justice to ourselves you would publish this letter.

Your correspondent interviewed the general agents of the section of Pharmacy and Chemicals, Messrs. Kaleski & Co., who, it is evident from what he writes, showed a great want of tact and a complete misinterpretation of the rôle they were called upon to perform. Your correspondent goes on to state that a copy of the "History of the

Pharmacie Centrale de France" which he had seized upon was rudely taken away. It might be inferred from this statement that our personal employés had been guilty of such a mistake, which certainly was not the case. As a matter of fact, we are represented at the St. Louis Exhibition by the director of our Lyons House, Mr. Soenen, one of our most esteemed colleagues. He is a man of great ability and of high attainments, and a courteous gentleman, who would have welcomed your correspondent and given him all the assistance in his power. It seems more than probable, however, that your correspondent wrote the article before our representative arrived at St. Louis, and we may therefore assure anyone visiting the exhibition of a courteous reception from him.

Very truly yours,

ASTOR BOSSELIER for CHARLES BUCHET & CO.
(PHARMACIE CENTRALE DE FRANCE, LIM.).

Trinity Square, E.C., September 27.

Beecham's Pills in Ireland.

Messrs. Leonard & Co., Dublin, send us a letter they have received from the Board of Inland Revenue (25,692 S./1904), in which Mr. F. Atterbury, Assistant-Secretary, on behalf of the Board says :

The Board . . . consider that the supply by Messrs. Beecham for sale in Ireland of boxes of pills wrapped and marked in the manner shown in the sample forwarded by you is open to serious objection, and they accordingly propose to address Messrs. Beecham direct on the subject.

This has reference to Messrs. Leonard & Co.'s complaint stated in these columns on September 10. They now add :

It is right to state that the owners of Williams's, Doan's, Carter's and several other articles treat the Irish trade very fairly. They allow the full price of the stamp, and as the retailer's customer is never charged for the stamp he gets the advantage he is legally entitled to. Bile beans (Forde's) are being sold on somewhat similar terms to Beecham's, and we must therefore bring them before the notice of the Inland Revenue authorities to have the legal position of chemists defined in regard to them. We are free to confess that had Beecham's pills been on the P.A.T.A. list we should probably not have been so keen about the interests of the Inland Revenue.

Treating Minor Ailments.

SIR,—I am of the opinion that the course of study in physiology and pathology is a necessary one for the present-day chemist. It is quite palpable to all who have investigated the question that the average chemist, by virtue of his superior chemical and dispensing knowledge, is able to write a far more elegant prescription than the average modern medical man. This being the case, in order to make diagnosis of simple ailments correct, and their treatment proper, thus avoiding the too careless and ready censure of a coroner who in many cases knows nothing about medicine or the treatment of disease, it would be wise for the Pharmaceutical Society to have these subjects included in their curriculum in order that its members may be placed on a solid legal footing when treating minor ailments, such as the chemist has been consulted about by the public from time immemorial. I shall be very pleased to subscribe to any movement which may be made to further this and "Experientia's" suggestion. Perhaps Mr. Hagon, as an aggressive member of the Pharmaceutical Society, will take steps to push this matter forward. It must be done as soon as possible; to waste time would be bad policy. If midwives can enjoy so much protection with small knowledge and be entrusted with the care of a human life, surely the chemist, who is much more educated and better equipped in every sense, should enjoy this right, especially as he already has, and will have, the confidence of the British public, the well-educated as well as the poorer classes rewarding him with this.

Yours truly,

VERITAS. (244/1).

[“Provided always, that such examinations shall not include the theory and practice of medicine, surgery, or midwifery.”—Pharmacy Act, 1852, Section VIII. This has to be wiped out of the Act before the Pharmaceutical Society can include physiology and pathology (in relation to the cure of disease, at least) in the qualifying examination. Section XVI. of the 1868 Act provides that registration under it “shall not entitle any person so registered to practise medicine or surgery, or any branch” thereof.—EDITOR.]

Mist. Paget.

SIR.—The following was always used in the military hospital in South Africa where I was dispenser during the late war :

Copaiba	...	...	...	...	xx.
Tr. quilliae	...	...	...	...	xxx.
Spt. aether. nit.	...	...	...	...	xxx.
Aquam camphorae ad	...	...	...	3j.	

Ter in die.

Yours truly,

C. WOOD.

Letters in Brief.

THE GLYN-JONES TESTIMONIAL.—*A Poor but Grateful Chemist* (247/72) writes: "I hope there are not many who have forgotten, like myself, to send along their little mite. I thank 'Xrayser' for his remarks, which brought to mind my neglected intentions of contributing to the fund in acknowledgement of the services of the man who has, to my mind, rendered more financial help to the impoverished chemist than any man living. 'Procrastination is the thief of time'; I hope it will not be the thief of the Testimonial Fund, as I understand the dinner is next week, and it will be a lasting disgrace to the chemists of this country if the sum given is not a substantial one. I think if the duty of every one to contribute, however small, and show that chemists are men with some gratitude."

THE SUPPLY OF PYRIDINE.—*Messrs. Blagden, Waugh & Co.*, writing in regard to the German disquietude about the supply of pyridine for denaturing alcohol, say: "There is no cause for alarm. Two countries have recently given up using the article, and, although the German consumption has undoubtedly slightly increased during the last twelve months, there is no shortage of the material."

Legal Queries.

Labels to be marked "Liable" or "Not liable" to medicine stamp-duty should be sent to the Editor in duplicate and with a stamped and addressed envelope for return of the marked ones, if desired.

246/30. *Ebor* asks: "If acid. acet. dil. be packed in penny bottles and sold as 'Vinegar—not malt vinegar,' is this legal?" Perfectly. Some Sale of Food and Drugs Acts officers insist that vinegar must be made by the fermentation of an alcoholic liquid; but magistrates have frequently refused to convict for the sale of diluted acetic acid as vinegar. There have been numerous convictions, however, for selling coloured acetic acid as "malt vinegar."

252/52. *E. H. L.*—If you look in our *Diary*, you will find full particulars about the registration of labels, both as trade-marks and at Stationers' Hall. The latter registration is almost as effective as the former, provided what you have to register is absolutely original.

252/52. *Lambeth*.—The disclosure as to the principal ingredients of the cough-remedy must appear on every packet or box of it that you send out labelled as such. The size of the box does not alter the law. If no label is put on penny packets, then no disclosure thereon is necessary.

243/39. *W. S.*—"Salicylic corn-silk" may in some cases be a non-dutiable title, but "Smith's salicylic corn-silk" is dutiable. Why not strictly accord with the Board of Inland Revenue's instruction? This is that "the label contain an adequate indication of the ingredients." We do not consider the adjectival use of "salicylic" to fulfil that requirement in either spirit or letter.

Miscellaneous Inquiries.

We endeavour to reply promptly and practically to trade questions of general interest, but cannot guarantee insertion of replies on a particular date, nor can we repeat information given during the past twelve months.

232/5. *C. G.*—Deblooming Mineral Oils.—The chemical used for this is nitro-naphthaline.

245/35. *S. F. A.*—(1) Killing Worms in the Soil of Potted Plants.—Use either lime-water, salt-solution, or a weak solution of corrosive sublimate. (2) The sections of indiarubber balls are stuck together with rubber solution.

232/15. *S. R. F.*—The Coloured Varnish used for fairy lamps is made by adding spirit-soluble anilines to a spirit-varnish, but before adding the dye it is necessary to shake up the varnish with calcium or magnesium carbonate to remove acidity. If the varnish is used with the resin acids unneutralised, the colours quickly fade.

228/50. *H. R.* (Cape Town).—It will be necessary to work out a Brown-boot Polish to suit your climate on the lines of the recipes in "Pharmaceutical Formulas," Vol. I. By using some soap in the first recipe you could retard the drying of the paste.

246/44. *H. W. G. M.*—Kainite of the Stassfurt beds is a double salt of potassium and magnesium sulphate combined with magnesium chloride. The expression "pure kainite" is probably used to denote freedom from earthy matter.

242/74. *G. A. W.*—There is no special work published on the Manufacture of Phosphates, but the matter is dealt with in Thorpe's "Dictionary of Applied Chemistry."

238/1. *Hus.*—Chicken-house Pest.—You will find a liberal application of sulphur to the crevices of the chicken-house the best means of clearing out the insects about which you complain. Some poultry authorities recommend carbolic powder, which should contain a fair proportion of acid to be effectual.

249/14. *Rhei.*—The qualifications for entering the Royal Army Medical Corps are those necessary for enlistment as a private soldier, and the life is the same as that of other soldiers, except that the work is a trifle harder, if spent in a large hospital. The work (apart from drill peculiar to the corps) includes nursing the sick, cleaning them and the wards, and generally assisting the medical officers and non-commissioned officers of the corps. Compounders are selected from the latter only. It is extravagant to describe the pay as "salary": it is the ordinary rate of soldiers' pay. You had better speak to a recruiting-sergeant.

233 53. *C. S.*—American Peach-bitters.—The following recipe is given in "Pharmaceutical Formulas":

Peach-kernels or bitter almonds	9 oz.
Angostura bark	...
Pale brandy or proof spirit	1 gall.

Slice the peach-kernels or almonds and break up the Angostura bark and digest for fourteen days; strain and add

Sugar	...	...	...	2 lb.
Peach-juice	...	...	...	2 quarts.

previously dissolved.

When the peach-juice is not procurable, water and artificial essence of peach, with a little citric acid, is used.

236/15. *Anxious.*—Vitalising Powder for brewers' barm. This we find to be flour with a small proportion of tartaric acid. It acts as a food for the *Saccharomyces cerevisiae*.

242/65. *H. T. B.*—Blaek Snuff.—From its irritating effects we think this contains cayenne, but the colour is disguised.

232/6. *J. B.*—Cream-of-tartar Substitute.—This is one of the acid phosphates mentioned in "Pharmaceutical Formulas," page 280.

189/65. *Cheshire.*—(1) Paste-polish for Box-ealf Boots. We are not acquainted with the polish you mention, but the modern polishes—more in the nature of creams than pastes—are made from such formulas as the following :

Gelatin	...	...	...	3vij.
Iceland moss	...	...	...	3j.
Ivory-black	...	...	...	3iv.
Fast blue-black	...	...	...	3j.
Creosote	...	...	...	5ij.
Water	...	...	...	1iv.

Soak the gelatin in 2 pints of water overnight, and dissolve in a water-bath. Boil the Iceland moss with a pint of the water for half an hour and strain. Dissolve the aniline dye in the other pint of water, and mix with the remaining ingredients, the ivory-black being first rubbed smooth with the warm gelatin solution.

(2) Black Ink for Rubber-stamps.—The following is a representative recipe :

Deep blaek E	...	...	...	5ij.
Distilled water	...	...	...	5x.
Acetic acid	...	...	...	5ij.
Rectified spirit	...	...	...	3iss.
Glycerin to	...	...	...	3x.

Make a solution by rubbing in a mortar.

249/63. *J. C. H.*—Cassell's "Family Physician" is the better of the two works on domestic medicine you mention.

229/65. *H. C. D.* Staining Ivory Green.—The old process used to be to soak the ivory in a solution of verdigris in vinegar; the modern is to boil in a solution of iodine green.

157/61.—*Exact.*—Powder for Fetlock-joint.—This appears to be a mixture of zinc sulphate and lead acetate disguised with black oxide of antimony. With a few experiments you will probably be able exactly to match the sample.

149/1. *Newtown.*—We are unable to find out the composition of the whitlow-ointment.

244/6. *E. W. B.*—Bullock's Blood for internal use is generally defibrinated (*C. & D.*, March 12, page 446), but if wanted to contain the fibrin a good proportion of glycerin and a small quantity of spirit of chloroform added to the fresh blood would probably prevent coagulation and act as a preservative.

228/51. *S. J. R.*—We do not know "Brown oils" for veterinary use. Perhaps it is a local name for black oils.

249/20. *W. F. G.*—Dental Cements.—We must refer you to a note on zinc-chloride and zinc-phosphate cements which appeared in the *C. & D.*, June 28, 1902, page 990. Three or four formulas are given there, and there are others in "Pharmaceutical Formulas."

245/59. *Photo.*—Qualified Locum-tenentes obtain from 30s. to three guineas according to the class of trade and whether indoors or outdoors. You will find many advertisements for *locum-tenentes* in the *C. & D.* Supplement.

22/9. *Kerolid.*—Tamarinds in Cough-mixture.—Boiling water extracts the medicinal properties (vegetable acids) from tamarinds. The decoction is strained without pressing, so as to reject the large quantity of extractive matter that would pass through with pressure.

214/67. *Lawn.*—Destroying Worms on Lawns.—The solution you send is the mercuric one mentioned in "Pharmaceutical Formulas." The stock solution is made by dissolving 1 oz. of corrosive sublimate in a pint of hydrochloric acid and then diluting each ounce to a pint with water. Of the weaker solution a teacupful is added to a canful of water for use on the lawn.

228/44. *H. L. S.*—Bottle-capping Composition.—This is apparently the gelatin preparation mentioned in "Pharmaceutical Formulas" (gelatin 7 lbs., glycerin 10 oz., water 60 oz.), but is coloured with zinc oxide.

249/66. *Substitute.*—Cheap Saline.—The effervescent properties of this saline are not very grand on account of the large proportion of sugar present. The last named ingredient helps to explain the cheapness.

227/11. *Nostricbor.*—Everton Toffee.—The following is from "Pharmaceutical Formulas," Vol. II.:

Sugar	...	...	...	...	4 lbs.
Water	...	...	...	...	15 oz.
Cream of tartar	...	...	...	...	$\frac{1}{2}$ dr.
Butter	...	...	...	...	2 oz.

Put the water, sugar, and cream of tartar into a pan and stir till boiling; do not stir after it begins to boil. Add the butter after removing from the fire, but do not stir it in.

216/48. *Wood.*—The powder for adding to flour to make the bread lighter and a larger yield only gives indications of rice starch. We do not find that it contains any of the usual lightening ingredients of self-raising flour. A little information as to how and in what proportions the substance is used would perhaps have assisted us.

127/52. *Lysol.*—Ointment for Cracked Heels and Grease. This resembles the following:

Sulphur sublim	...	...	...	...	3 <i>j.</i>
Plumbi acet.	...	...	...	...	3 <i>ss.</i>
Creolin	...	...	...	...	3 <i>ss.</i>
Vaseline	...	...	...	...	3 <i>iv.</i>
Lanolani	...	...	...	...	3 <i>iv.</i>

Misco.

189/34. *J. G.*—Oil of Earthworms (*oleum lumbricorum*) was last official in the Edinburgh Pharmacopœia, 1744 when it was made by boiling washed earthworms $\frac{1}{2}$ lb. in white wine $\frac{1}{2}$ pint and olive oil $1\frac{1}{2}$ pint till the wine is dissipated, and straining. Oil, sesami coloured with rad. anchusæ is the modern representative of this historic oil.

219/55. *Waterproof.*—Probably the aluminium-tannate process has been employed in the sample you send, but we are unable to confirm this surmise.

87/30. *G. W. A.* (Natal); 224/41, *Thistle.*—Powders for Curing Inebriates.—These usually contain small quantities of strychnine or powdered ipecacuanha. Regular doses of these drugs create, as you can imagine, a dislike to the fluids into which they are placed. The article on "Drunk-cures" in the Winter number, page 187, gives particulars of a method in which strychnine and cinchona are the active ingredients.

240/37. *G. H. D.*—Crystoleum Process.—We reported on a series of the preparations used in the crystoleum process of colouring photographs in the *C. & D.*, November 29, 1902, page 13, which please refer to as the note is too long to repeat.

227/21. *D. B. N.* (Bombay).—We can best reply to your query by referring you to the chapter in "Pharmaceutical Formulas" on "Preparations for the Hair," but you must disabuse your mind of finding any "really and truly efficacious" remedy for baldness or falling hair.

6/8. *H. B. R.*—Paint-remover.—This is a mixture of carbon bisulphide and acetone to which a little paraffin wax or other grease has been added. The wax is added to delay evaporation of the solvent.

235/45. *D. & Co.*—Horse-drink.—You must send us some particulars about this before we undertake an examination as to its composition.

235/1. *Leicester.*—Purifying Drinking-water.—The use of one of the water-stills which Bennett, Sons & Shears advertise in the *C. & D.* would give a good distilled water, but "flat" to the taste. It is probable that filtration through one of the Pasteur-Chamberland filters (Defries & Sons) would be the better method of purifying the drinking-water, and it would be more convenient than distillation.

227/65. *C. T. J.* (Penang).—(1) Inf. Quassiae Conc.:

Quassia	...	...	...	...	3 <i>ii.</i>
Rectified spirit	...	...	...	...	3 <i>iv.</i>
Water	...	...	...	...	a sufficiency

Macerate the quassia in 16 oz. of water overnight, strain, and wash the mare with water to 16 oz. Add the spirit and $\frac{1}{2}$ oz. of kaolin. Shake well and filter, returning the filtrate until it comes through bright.

(2) Aniline Salt is the commercial name for analine hydrochloride, which is largely used by calico-printers to produce aniline black. It is made by mixing pure analine and hydrochloric acid, in the calculated quantities, in a stone tank, and allowing the salt to crystallise out. The salt is then dried by means of a centrifugal machine. (3) Embalming. There was an article on this subject in the *C. & D.*, July 25, 1896, page 150. The solution required is:

Zinc chloride	...	...	...	200 grams
Sodium chloride	...	...	...	2 kilos
Water	...	...	...	6 litres

This quantity is sufficient for one corpse. The liquid is injected by means of a syringe through an incision in the carotid artery. Before beginning the work one end of the artery is tied, and when no more liquid can be injected the other end is tied and the orifice in the neck sewed up.

217/31. *S. D. C.*—Hair-dyeing.—We can only recommend you to undertake a research on the subject on the lines laid down in "Pharmaceutical Formulas." Paraphenylenediamine is not a dye you can recommend for the hair, as cases have been reported of skin-injury resulting from its use. You can get a supply of human hair from a hairdresser for judging the effects of the various dyes.

214/14. *W. B.*—The two *Pharmacopœias* are not of any special antequarian value.

223/44. *W. J. M.*—(1) Stencil-ink in cakes is a mixture of drop-black and powdered acacia, made into a mass with water. In the case of coloured inks, Prussian blue, Venetian red, or appropriate ochres are used in lieu of the drop-black. (2) "Pharmaceutical Formulas" gives several recipes for bottle-waxes, to which please refer. (3) Butter-flavour.—We can add nothing to the reply we gave a correspondent in the *C. & D.*, March 5, 1904, page 398.

55/62. *N. & S.*—Coloured Ticket-inks.—The basis of these inks for ticket-writing is made by boiling together

Shellac	...	...	...	...	...	5 <i>iv.</i>
Borax	...	...	...	...	...	5 <i>ui.</i>
Water	...	...	...	...	...	6 <i>ij.</i>

When solution has taken place allow to cool; filter, and dissolve appropriate aniline dyes in the liquid.

25/7. *Up-Country* (Ceylon).—Motor-cycle Accumulators. If you can supply us with particulars of the brand of the liquid or some further characteristics, we may be able to help you.

201/67. *N. C. Co.*—Two formulas for Brass-polish were given in the *C. & D.*, September 3, page 443, to which please refer.

163/31. *S. J. S.* (Melbourne).—(1) Tar oil (from wood) is the most suitable diluent or thinning agent for Stockholm tar. (2) It is the tar oil from gasworks or blast-furnaces that is used in making disinfectants, as it is cheaper than the wood-tar product. We do not know the sp. gr. of the oil, but the tar-distiller will have no difficulty in recognising what it is you require.

197/9. *X. Y. Z.*—We do not know to what book you refer, but either Heath's "Manual of Minor Surgery and Bandaging" (6s.) or Warwick & Tunstall's "First Aid to the Injured and Sick" (2s. 6d. Wright, Bristol) is suitable for chemists' use.

171/50. *H. D.*—(1) To incorporate a large amount of terebene in an ointment it will be necessary to mix the liquid with an absorbent substance like kieselguhr before adding the lard or lanoline. (2) Oil of verbena would be the most suitable scent to use for disguising the odour of the terebene ointment, and the colour could be managed by the use of rose-pink. (3) Commercial terebene is the crude product resulting from the action of sulphuric acid on turpentine, but for medicinal use terebene should be free from acid and should not contain unaltered oil of turpentine.

250/40. *Borax.*—The addition of chloroform to preserve samples of urine is the least objectionable. Most other preservatives have an influence on the analysis or form compounds with the urine-constituents.

250/27. *Victory.*—Soluble Essence of Lemon.—Refer to *C. & D.*, April 23, 1904, page 665.

147/18. *Three Spirs.*—(1) A formula for Combined Toning and Fixing Bath was given in the *C. & D.*, as recently as September 24, page 559. (2) Information as to registering trade-marks and copyrighting labels is contained in the *Diary*, page 223.

250/44. *J. B.* wants to know if this is right:

A paper read before the — by Dr. — on emulsion of cod-liver oil, after giving details and statistics showing the superiority of emulsion over the plain cod-liver oil, observed that it was necessary that an emulsion should not separate, as in emulsions that separated he found the amount of oil in one spoonful will vary 300 per cent. from that of another.

This is the old percentage problem back again. A man who invests 100*l.* and sells out at 400*l.* is said to have made 300 per cent. on his investment, although the profit happens to be only 75 per cent. of the return. But we do not see how it is possible for the cod-liver oil in teaspoonfuls of emulsion to vary 300 per cent. because it is bound to be within the hundred. We presume the paragraph means that one teaspoonful of the oil will contain 10 minimis of oil and the other 30 minimis, or — But we give it up. Whatever does the paragraph mean?

"Sal Purgante as sold in Italy is mag. sulph.," writes a correspondent (250/45), "and I have no doubt the Spanish sal de purgante is the same."

Information Wanted.

Postcard replies to any of subjoined inquiries will be esteemed.

255/69. Who are the makers of "Dermogen"?

252/56. A firm of exporters want to buy the following articles from the makers. Can readers oblige with the addresses?—Harrop's linen-glaze, Hunter's solution of chloral, Brodie's corn-cure, Valentine's walnut stain, MacKenzie's celluloid respirators, and Gaeffe's electro-medical battery.

September Pharmaceutical Examinations.

WE have received from the Registrar of the Pharmaceutical Society of Great Britain the following list of successful candidates who were granted certificates at the recent Major and Minor Examinations held in London:

Major Examination.

Harris, John, Clapham | Mills, Herbert A., Brixton

Minor Examination.

Andrews, B. L. M., Royston
Ashton, E. F., Birmingham
Bennett, E., New Brighton
Bennett, S. T., Liverpool
Carter, H. L., Exmouth
Chard, Harold, Louth
Clark, E. H., Birmingham
Coates, R. S., London
Cuthbert, T. H., Lancaster
Dutton, C. C., St. Helens
Eaton, Walter, Brigg
Edis, Sarah W., Liverpool
Esam, Richard M., Leicester
Evans, E. W., Birmingham
Fillingham, B., Grantham
Fitzgerald, S. W., Birmingham
Fox, Frederick, Elvington
Green, Charles O., Brackley
Griffith, Robert O., Pwllheli
Harker, G. C., Richmond, Yorks
Hart, H. S., Birmingham
Harvey, H. M., Dover
Hickling, J. E., Barnstaple
Hill, Miriam, Birmingham
Holloway, E. F., London
Horrod, G. W. T., London
Howe, Arthur, Hull

Jennens, J. H., Birmingham
Johnson, F. L., Norwich
Kemp, W. G. F. H., Leeds
Loxley, F. L. K., Oxford
Macdonald, W. R., Alderley Edge
Martin, William, London
Mizrakee, J. E., London
Murray, T. N., London
Paddock, G. E., Bootle
Pine, W. W., Southsea
Richardson, P. G., Dudley
Ross, William S., Montrose
Runsey, J. C. H., Dulwich
Smith, Alfred, Brighton
Story, Edith M., London
Suiter, John R., London
Taylor, W. J., Ruabon
Thomas, Owen, Cardigan
Thompson, E. H., Birmingham
Trick, William W., London
Vickers, W. A., Liverpool
Warner, C. H., Long Sutton
Watson, Guilherma M. W. D., London
Watson, John A., Clapton
Williams, R. H., Amlwch
Wright, J. W. A., Bradford

Coming Events.

Notices for insertion under this heading should be received by the Editor on Wednesday of each week.

Monday, October 3.

Pharmaceutical Society of Great Britain, 17 Bloomsbury Square, W.C., at 3 P.M. Presentation of the Pereira Medal and inaugural address to students by Dr. A. W. Crossley.

Pharmaceutical Society of Ireland, 67 Lower Mount Street, Dublin, at 7.30 P.M. Annual Meeting.

Irish Chemists' Assistants' and Apprentices' Association, 73 Harecourt Street, Dublin. Opening meeting of the Session. Inaugural address by the President, Mr. E. B. Aplin.

Tuesday, October 4.

Bradford Chemists' Association, Royal Hotel, at 9 P.M. Report of the Co-operative Buying Committee (in private).

Wakefield Chemists' Association, Victoria Temperance Hotel, at 8.15 P.M. First meeting of the session.

Wednesday, October 5.

Pharmaceutical Society of Great Britain, 17 Bloomsbury Square, W.C., at 11 A.M. Council-meeting.

Pharmaceutical Society of Ireland, 67 Lower Mount Street, Dublin, at 3 P.M. Council-meeting.

Complimentary dinner to Mr. W. S. Glyn-Jones, Barrister-at-Law, in the Victoria Hall, Hôtel Cecil, W.C., at 6.30 P.M. *Stockport Chemists' Association*, Albert Hall, at 9 P.M. Ordinary meeting.

Thursday, October 6.

Great Yarmouth Pharmaceutical Association, 156 King Street, at 8 P.M. Ordinary meeting.

Chemists' Assistants' Association, 73 Newman Street, W., at 9 P.M. Opening meeting of the session; address by the President, Mr. R. E. Lownsborough.

THE OPENING MEETING of the Western Chemists' Association is fixed for October 19.

The annual dinner of the Bournemouth Pharmaceutical Association is to take place at the Hôtel Métropole on October 26. The President of the Pharmaceutical Society—Mr. R. A. Robinson—is expected to be present.

Trade Report.

NOTICE TO BUYERS.—The prices given in this section are those obtained by importers or manufacturers for bulk quantities or original packages. To these prices various charges have to be added, whereby values are in many instances greatly augmented before wholesale dealers stock the goods. Qualities of drugs and oils vary greatly, and higher prices are commanded by selected qualities even in bulk quantities. It would be unreasonable for retail buyers to expect to get small quantities at anything like the prices here quoted.

42 Cannon Street, London, E.C., September 29.

THERE is a better tone about the drug and chemical markets this week, and although alterations in value are fairly numerous, many of them tend in a higher or firmer direction. Acetate of lead has substantially advanced. Lycopodium and ipecacuanha are dearer. Cloves have been in large speculative demand at advancing prices, and shellac is lower in all positions. Chamomiles are lower. Among essential oils, American and Japanese peppermint are much quieter, and there has been a slight weakening of prices, due to "bear" tactics in New York. Star-aniseed oil is much firmer, and eucalyptus oil continues in good demand at firm prices. The following are the principal alterations of the week :

Higher	Firmer	Easier	Lower
Areca	Buchu	Grains of	Aloes, Cape
Cloves	Cardamoms	Paradise	Cascara
Lead acetate	Ipecacuanha	Guaiacum	Chamomiles
Lycopodium	Manna	Oil, pepper-	Chillies
Oil, turpentine	Menthол	mint	Cinchona
Pepper, white	Oil, aniseed,	(H.G.H.)	(Loxa)
Sarsaparilla (grey Jam.)	star	and Jap.	Shellac
	Oil, castor	dementh.)	Wax
	Oil, cod-liver	Rosin	Carnauba
	Oil, palm		
	Petroleum		
	Quinine (see, hands)		

Cablegrams.

SMYRNA, September 28 :—The sales of opium for the week ending Wednesday amount to 250 cases, principally on United States account, at from 6s. 4d. to 6s. 11d. per lb., f.o.b.

HAMBURG, September 29 :—Carnauba wax is dull of sale. Ergot is quiet, and tending easier, at 320m. per 100 kilos. Russian cantharides are firm, at 975m. per 100 kilos.

NEW YORK, September 29 :—Business here is flat. Cascara sagrada is quiet, at 7½c. per lb., and balsam copaiba is slow of sale, at \$3.60 per lb. Menthol is firmer, at \$3.25; and lycopodium has advanced to 80c. per lb., and is strong. Ergot is firm, at 40c., and senega is quiet, at 70c. per lb. Golden seal (hydrastis) is firm, at \$1.35 per lb. Peppermint oil in tins is easy, at \$3.60 per lb.

German Methylated Spirit.

The German Spirit Centrale has advanced the price of methylated spirit by 10m., and the wholesale price of 90-per-cent. will in future be 36m. per 100 litres full strength, against 26m. previously. In the retail trade the price of 90-per-cent. spirit is 40pf. (=5d.) per litre, and of 95-per-cent. 43pf.

Seychelles Vanilla.

A Seychelles correspondent writes, under date September 7, that the persistent drought has at last ceased, and has been followed by frequent refreshing and invigorating showers, proving beneficial to all vegetation. The many months' want of rain, however, has caused incalculable damage to the vanilla-plantations, cocoanut-trees, and root-crops throughout Seychelles, and in consequence the present crop of vanilla certainly will not exceed one half that of last year, and it is to be feared that the quality will be inferior. The flowering of the coming (next year's) crop has commenced satisfactorily, but from the sickly and weakened conditions of the vines a small quantity of comparatively short and inferior pods must result. It is, however, too early to express a definite opinion as to the outturn of the next crop.

South American Copper Sulphate.

In our issue of January 24, 1903, page 136, we gave particulars regarding the Copaqueira Copper Sulphate Company (Limited), which was registered in 1900 to acquire a deposit of natural sulphate of copper existing in South America. We now learn that at an extraordinary meeting of the company, held in London on September 23, it was resolved to increase the capital by the creation of 194,000 new shares of 1*l.* each. The Chairman (Mr. Campbell-Johnston), in a lengthy and optimistic speech, explained the present position of the company, enumerating the principal assets. The company possessed thirteen claims, forming the only large mine of sulphate of copper known to the world. A few of the assets were one hundred miles of cart-road, three-quarters of a mile of railway, a lixiviation-plant covering about one acre, now at work, capable of treating 500 tons matrix per twenty-four hours, and dehydrator for drying crystals of copper sulphate. The company were also the owners of the Huinquitipa Copper-mines, which the Chairman purchased on his own responsibility at 9,000*l.* less than the price asked, and his judgment had been justified, as the Antofagasta branch line would be completed by the end of 1905. He (the Chairman) would not disguise the fact that they wanted money; and now they understood the value of the ridiculously inadequate debenture issue of 20,000*l.* which is secured on all the assets, he felt they would not have to wait long for the shareholders' applications for the balance unissued.

ACID, ACETIC.—In view of the continued short supply of acetate of lime and the advanced prices asked for that article, the market for acetic acid of all strengths remains very firm, with a growing scarcity, and makers are unwilling to sell for forward delivery at present prices. Glacial is obtainable at 31*l.* 10*s.* per cwt.

ANISEED.—Russian is scarce on the spot, and firmly held at 20*s.*, and for shipment 19*s.*, c.i.f., is quoted.

ARECA.—Good bold sound are worth 14*s.* 6*d.* to 15*s.*, according to quantity.

ARROWROOT.—Quiet at auction, a few barrels of good manufacturing St. Vincent changing hands at 1*½d.* per lb.

CALUMBA.—From Hamburg fine natural quality is quoted 24*s.* per cwt., c.i.f.

CANTHARIDES.—Very few offers of new Russian flies are available, the lowest quotation we hear of on the spot being 4*s.* 10*d.* per lb. A small parcel on the way from Russia to the Hamburg market is quoted 4*s.* 8*d.*, subject to safe and sound arrival. Business has been done in Chinese cantharides at 1*s.* 6*d.* to 1*s.* 9*d.* per lb., c.i.f. terms, and since cables state that the stock in China is entirely exhausted.

CHAMOMILES.—Belgian flowers are rather lower this week, No. 1 being quoted at from 75*s.* to 80*s.* and No. 2 at 65*s.* per cwt., c.i.f.

CHLORAL HYDRATE.—Makers' price is unaltered at 3*s.* 3*d.* per lb. for crystals in jars, duty paid, and 1*d.* per lb. less for cake.

CINCHONA.—The auction to be held at Amsterdam on October 6 will consist of 6,894 bales and 499 cases of Java bark, containing 32,802 kilos. of sulphate of quinine. The manufacturing-bark contains an average of 5.47 per cent. against 5.57 per cent. for the September auction, and 5.32 per cent. average for the ten auctions held in 1903. At the drug-auctions a more plentiful supply of Loxa than usual was offered, and sold at rather lower prices, from 11*d.* to 1*s.* per lb. being paid for 54 serons of fair quill, and for 57 serons from another catalogue 10*¾d.* to 11*d.* was paid, dull Loxa chips selling at 8*¾d.*, and fair medium Huanaco quill at 9*d.* per lb. Ten bales of thin bold flat Calisaya were bought in, 1*s.* being refused for the sound, and in another instance a lot of 69 bales flat Calisaya was bought in at 1*s.* 2*d.*

COCAINE.—The demand is quiet, and mostly appertains to small second-hand lots of hydrochloride at rather under makers' prices. Such parcels are, however, scarce, especially the favourite brand. We note the arrival of 5 cases of crude from Callao.

CORIANDER-SEED.—Russian of the new crop is quoted at 25*s.* on the spot.

ERGOT.—There is practically no inquiry for ergot at the moment, and quotations are unaltered. Good sound quality of Russian is offered to arrive at 1*s.* 5*½d.* per lb. in 1-ton lots, and a parcel of Spanish in Hamburg is quoted 1*s.* 6*½d.*

ETHER.—A Continental report states that the rise in spirit has caused a considerable increase in the quotations for ether. The current price of 0.722 is about 265m. per 100 kilos. Naturally all other articles containing spirit are influenced in proportion to the amount of spirit they contain.

EUPHORBIUM.—From Hamburg prime natural quality is quoted 30s. per cwt., c.i.f.

FENUGREEK.—Mogador is quoted 8s. 6d. per cwt. on the spot.

GALLS.—A small business is reported in Chinese at 54s. on the spot, and for arrival sellers ask about 52s., c.i.f. Persian are quiet, with sellers of blue at 60s. per cwt.

GAMBIER.—Cubes are quiet, with small sales at from 29s. to 30s. per cwt.

GOLDEN SEAL.—Extreme prices have been paid for retail quantities of this article—viz., 7s. 6d. per lb.—but a little could be obtained at 6s. 3d. net.

GRAINS OF PARADISE are rather easier, at 42s. per cwt.

LYCOPODIUM.—A further advance has taken place on the spot owing to scarcity, 3s. 6d. per lb. being the asking-price. A parcel is expected to arrive in Hamburg in about a fortnight, for which 3s. 4d. per lb., c.i.f., is asked.

MANNA.—Unfavourable reports have been received from Sicily in regard to the new manna-crop, it being stated that heavy rain has damaged the trees, and the quantity collected up to the present time is estimated to be far below an average crop. Offers from Sicily for new crop for forward delivery are as high as 1s. 11d. per lb., and for small flake 1s. 4d. per lb., c.i.f. London, is quoted.

MATICO.—A small consignment which has arrived on the Hamburg market is offered at 9½d. per lb., c.i.f.

MENTHOL.—The market continues the firm tone noted last week, holders quoting Kobayashi brand at 10s. 6d. per lb. on the spot, at which figure small sales have been made. For shipment some quantity of this brand has been sold at 9s., c.i.f., for November-December shipment, and 8s., c.i.f., for January-March.

NUX VOMICA.—Fair Calcutta seed is obtainable from second-hands at 10s. 6d. per cwt.

OIL, ANISEED, STAR.—An endeavour is being made to impart a firmer feeling, and with this intention one large holder has advanced his price to 5s. 1d. per lb. on the spot.

OIL, CASTOR.—Prices of French come 6d. per cwt. dearer this week. On the spot medicinal in barrels is obtainable at 27s. 10s. per ton, and first-pressing at 22s. 10s. Hull make is also firmer, at 24s. 5s. per ton for medicinal in barrels, and 3d. per lb. in cases, for prompt delivery ex wharf London.

OIL, CITRONELLA.—Quiet, at 1s. 1d. to 1s. 1½d. for Ceylon.

OIL, COD-LIVER.—Our Bergen correspondent writes on September 24 that there is a fairly good demand for Norwegian cod-liver oil, and owners are not disposed to sell at the last price of 150s. per barrel, f.o.b., Bergen, for finest non-congealing oil. The exports from Bergen to date amount to 5,150 barrels, against 1,784 barrels at the same date of last year. A correspondent in the North sends us the following advice which he has received from Norway, and which has an indirect bearing on the cod-liver oil industry :

The Finmarken whalers have done very poorly this year. Next season some of them will probably try whaling in the northern waters beyond Norwegian limits, and boil their oil on board large steamers. Two companies have worked successfully this year about the Spitzbergen Islands in a similar way. Otherwise nothing new has as yet transpired on this matter, and we must wait till next year before we can draw any substantial conclusions.

In the drug-auction 5 casks of good non-freezing Newfoundland oil were bought in at 7s. per gal. The London agents report a fair demand for small parcels of Norwegian, and values are firm at from 155s. to 160s. per barrel. Non-freezing Newfoundland is worth 150s. to 155s. per barrel.

OIL, EUCALEPTUS.—During the past fortnight there has been an excellent demand, and sellers are rather scarce. Good B.P. quality is worth quite 1s. 2d. per lb. Present prices are considered too low, and already several small advances have taken place in Australia. Evidently the output there is shrinking, producers having found the

business unremunerative. Four cases of Magnet brand were held at 1s. 2d. per lb.

OIL, LEMONGRASS, is steady, at 8d. per oz. on the spot.

OIL, PEPPERMINT.—Business naturally has been on a much smaller scale this week, 16s. 9d. per lb. having been paid for small lots of American H.G.H. on the spot, but an easier tendency has set in, with sellers at 16s. 6d. Owing to the "bear" tactics of a few New York dealers, 15s. 9d., c.i.f., is now quoted for tin oil, against the previous quotation of 16s. 3d., c.i.f. For Japanese dementholised Kobayashi brand 6s. 3d. to 6s. 6d. is quoted. The price asked for 10 cases of Kobayashi unworked dementholised oil offered in auction was 6s. 3d. per lb.

OPIUM continues extremely quiet, good to fine Smyrna druggists' offering at from 7s. 3d. to 7s. 6d. per lb. There is a little inquiry for Persian, and it is said 11s. 9d. has been refused, holders not wishing to name a price.

SMYRNA. September 16.—The market has again been active this week, the sales amounting in all to 133 cases, including 72 cases of common grades (destination unknown) at from 6s. 2d. to 6s. 6d.; 30 cases new current tale quale at 6s. 7d., for account of local and interior speculators; 10 cases for the Continent; and 26 cases for the United States. The following are the current quotations: Current t.q. as to quality, 6s. 1d. to 6s. 8d. per lb., f.o.b.; druggists', 6s. 11d. to 7s. 1d.; and Yerli druggists' and Karahissar, as to quality, 7s. 2d. to 8s. per lb., f.o.b. The market for rich grades continues to harden, and stocks are firmly held. The arrivals to date amount to 3,437 cases, against 1,326 cases at the same time last year.

Another correspondent, writing on September 17, states that since the date of his last review (August 27) the opium-market has been active throughout, both on export and speculative account. The transactions amount to 425 cases, including 30 cases very old common t.q. at the equivalent of 6s., 95 cases old t.q. of good quality, and 300 cases new Adette, Karahissar, Yerli, and Bogaditz t.q.

QUICKSILVER is steady, at 7s. 15s. per bottle from the importers, with second-hand at slightly below this figure.

QUININE is steady, but very quiet, at 10½d. per oz. for spot, and 11d. for December delivery. At the close 100,000 ozs. sold at 10½d. to 11d. spot, and March at 11½d. to 12½d. per oz. It is said that a large firm of speculative brokers are taking all the cheap lots off the market.

ROSIN is easier, at 8s. per cwt. for common strained ex wharf.

SCAMMONY-ROOT.—With fairly large stocks, the market remains very quiet, at 18s. per cwt., but for a round lot this price might be shaded.

SELLAC.—Business on the spot is of a retail description, 19s. per cwt. being quoted for fair Orange TN. There has been a considerable decline in the Calcutta rupee price, now Rs. 85 for TN Orange, at which sales have been made. Prices of futures at one period showed a decline of 5s., but subsequently a partial recovery took place. Altogether a large business has been done, including October delivery at 190s. to 194s., November 182s., and December 178s. to 180s., these prices being paid on Wednesday.

SPICES.—At auction on Wednesday Jamaica was dull of sale, the 90 packages offered being bought in, as were about 100 packages of Cochin. Good fair Singapore Pepper was bought in at 6d., and privately fair on the spot is quoted 5½d. to 5½d., and to arrive the market is dearer, sales including August-October shipment at 5½d. and January-March at 5½d. Penang White at auction was taken out at 8d. for fair lined, and for arrival the sales include Singapore near at hand at 8½d., landed terms. Pimento steady at auction, ordinary to fair selling at 2½d. per lb. Chillies were again lower, fair bright red Nyassaland selling at 37s. per cwt., and yellowish at 32s. to 32s. 6d. Nutmegs were quiet, and Mace steady. Of Cloves, 12 cases of good bright picked Penang were offered, and bought in at 10½d. Privately a large speculative business has been done in Zanzibar cloves at a considerable advance, including August-October at from 7½d. to 8d., October-December at 5½d. to 6½d., and January-March at 5½d. to 6½d., closing sellers on Wednesday at 6½d. in this position. On the spot 7½d. to 8½d. per lb. has been paid for several hundred bales.

SUGAR OF LEAD has been advanced 1s. 6d. per cwt., foreign white treble-refined crystals being now quoted 26s.

to 26s. 6d. per cwt. on the spot. This advance is due to the advance of spirit in Germany, and there is a firm tendency about lead salts generally.

TRAGACANTH remains firmly held, but with the poor selection now on offer business is difficult to effect. It is anticipated that by the end of the year prices will have advanced a further 20s. per cwt., as both American and home buyers have so far purchased for immediate requirements only. This, added to the improvement in the cotton trade, helps to a feeling of confidence in the market. Fine druggists' is worth from 13*l.* 15*s.* to 14*l.* per cwt., and other grades in proportion.

TURMERIC.—Small sales of Cochin split bulbs have been made at 8*s.* per cwt., and for Bengal finger higher prices are asked. Madras is steady and unchanged.

London Drug-auctions.

At the first-hand offering of drugs to-day a fairly healthy tone prevailed, prices in most instances being steady. Cape aloes, under the influence of heavier supplies, declined about 3*s.* per cwt., and for Curacao no bids were made. Sumatra benzoin was neglected in sale, but a small business has been done privately. Round buchu-leaves are steady, and for "longs" decidedly higher prices were paid. Cardamoms were somewhat irregular, but the medium and bold sizes sold at a slight improvement. Loxa cinchona-bark was well represented, and prices eased somewhat. A further supply of cascara sagrada was forced off at a decline of 3*s.* to 4*s.* compared with the previous auction. Elemi continues neglected and there is a large supply now on offer. Fractionally easier prices were again paid for good glassy guaiacum in block, and a small offering of gamboge was held for a very high figure. Jamaica honey sold at very full prices, taking the quality into consideration; and for Rio ipecacuanha much firmer prices were paid. West Indian kola was about steady, and Tinnevelly senna was again in large supply, and sold at very steady to occasionally higher prices. For genuine grey sarsaparilla, which is scarce, higher prices were asked. Jamaica beeswax was quiet and unaltered, and Zanzibar showed a firmer tendency. The following table shows the amount of goods offered and sold:—

	Offered	Sold		Offered	Sold
Albumen	10	0	Ipecacuanha—		
Aloes—			East Indian	22	22
Cape	56	39	Rio (Matto Grosso)	23	6
Curacao	50	0	Myrrh	11	0
Areca	38	0	Oil		
Balsam—			cinuammon-leaf	2	0
Copaiba	1	1	cod liver (Newf.)	5	0
Benzoin—			eucalyptus	40	0
Palembang	25	0	lime	3	3
Siam	6	0	peppermint (Jap.)	10	0
Sumatra	66	12	rose	2	0
Buchu	8	6	Peach-kernels	3	0
Cardamoms	365	271	Rhubarb	60	3
Cascara sagrada	639	539	Sandarac	3	0
Chillies	15	0	Sarsaparilla	18	7
Cinchona	230	112	Seediae	6	*6
Coca-leaves	10	10	Seuna—		
Cumin-seed	10	0	Tinnevelly	962	962
Divi divi	3	0	Soy	86	0
Elaterium	1	0	Squill	40	40
Elemi	40	4	Sticklac	15	7
Gamboge	1	0	Tamarinds	108	0
Guaiacum	6	6	Wax (bees)—		
Huiaucum	6	6	Australian	1	0
Gum arabie	20	7	Cape	3	0
Honey—			East Indian	21	0
Honduras	32	13	Jamaica	23	5
Jamaica	70	61	Mogador	50	0
Queensland (tins)	2	0	Zanzibar	49	39
Kola	32	31	Wax, Japanese	50	0
Lime-juice	4	0			

*Sold privately.

ALOES.—Cape was in larger supply, and sold at a decline of about 3*s.* per cwt. compared with the last public auction. Fair to good bright hard firsts brought 31*s.* to 33*s.*; seconds, dullish and soft, 28*s.* to 30*s.*; and dull and drossy, 26*s.* 6*d.* to 27*s.* per cwt. A parcel of 50 boxes Curacao was offered, and for fair Capey lots 25*s.* was wanted, a bid of 21*s.* being refused for dull liver. We note the arrival of 40 kegs from Bombay per s.s. *Ballarat*, also 25 cases of Cape from Mossel Bay per s.s. *Armadale Castle*.

BALSAM COPAIBA.—A case of thick opaque Cartagena sold at 1*s.* 3*d.* per lb.

BUCHU.—In auction 2 bales of stalky round greenish sold at 7*1*/*2**d.*, and a bale at 5*3*/*4**d.*, and 3 bags of fair longs, slightly stalky leaves, sold at 1*s.* 8*d.* per lb., being much dearer. Privately 7*d.* per lb. has been paid for fair round greenish, but 7*1*/*2**d.* is now wanted, and for good greenish 8*d.* is asked.

CARDAMOMS were in good demand, rather firmer prices being paid for the bold and medium sizes. The following rates were paid:—Ceylon Mysore: Good bold pale, 2*s.* 2*d.* to 2*s.* 3*d.*; good bold pale, few open, 1*s.* 9*d.*; good bold, slightly yellowish, badly clipped, 1*s.* 8*d.* to 1*s.* 9*d.*; bold medium pale, smooth, 1*s.* 6*d.*; good medium palish, 1*s.* 3*d.* to 1*s.* 5*d.*; medium palish open, 1*s.* to 1*s.* 2*d.*; bold dullish round, 1*s.* 2*d.*; bold brownish, badly clipped, 1*s.* to 1*s.* 1*d.*; good small and medium pale, 1*1*/*2**d.*; long dull, badly clipped, 10*d.*; small palish, 9*d.*; very small pale, 8*d.* to 9*d.*; small pale open, 9*d.* *Splits*, good bold pale, 1*s.* 4*d.*; small and medium split, 8*d.* to 10*d.*; small split, 7*1*/*2**d.*; brown and splits, 7*d.* to 8*d.* Of native wild Ceylon, 3 cases offered, and sold at 2*s.* per lb. for good medium to bold. Decorated seed, fair Mangalore, 11*d.* Mysore, split, 9*1*/*2**d.*; greyish to fair, 10*1*/*2**d.* to 11*d.*; good dark, 11*1*/*2**d.* to 1*s.* per lb.

The exports from Ceylon from January 1 to September 5 were as follows:

	1901	1902	1903	1904
Lbs.	319,589	441,101	584,620	655,645

Of the last quantity the U.K. received 322,808 lbs., India 191,984 lbs., and Germany 99,714 lbs.

CASCARA SAGRADA.—A further forced sale was made to-day, when 539 bags of fair 1903 crop sold, without reserve, at from 35*s.* to 35*s.* 6*d.*, with one lot at 36*s.* per cwt., gross for net, no discount. These prices show a decline of from 3*s.* to 4*s.* on the previous auction sale under similar conditions.

COCA-LEAVES.—Ten cases of Ceylon Huanuco character sold at from 10*1*/*2**d.* to 11*1*/*2**d.* per lb. for fair to medium greenish, these prices being steady.

ELATERIUM.—One shilling per oz. net was the price asked for a box of about 94 oz.

GUAIACUM was fractionally easier, 6 casks of good glassy block selling at 7*1*/*2**d.* per lb.

HONEY sold at firm prices. Eight cases of fair amber liquid of syrupy consistency, in cases, sold at 24*s.* 6*d.*, and 2 cases brought 28*s.* for good bright; 7 other cases sold at 22*s.* 6*d.* for dark-brownish liquid. Good brown thick, in cases, brought 20*s.* to 21*s.*, dark-brown liquid in casks 15*s.* to 16*s.*, and pale yellow thick 17*s.* Honduras in cases (13) sold at 23*s.* for good banana-coloured setting.

IPECACUANHA.—Dearer. The offerings comprised a fairly uniform parcel of 22 bales East India ipecac., which sold readily at from 5*s.* 1*d.* to 5*s.* 3*d.*, with one bale at 5*s.* 4*d.* per lb., for good plump to extra plump native picked well-annulated root. A bale of siftings brought 4*s.* 9*d.* Less interest was shown in the offerings of Rio (Matto Grosso) and 10 bales were bought in at from 5*s.* 1*d.* to 5*s.* 3*d.*; and of another 13 bales offered 5 sold at 5*s.* 2*d.* to 5*s.* 3*d.* for ordinary to fair lean, a bale of stout reddish selling at 5*s.* 5*d.*—these prices being about 3*d.* per lb. dearer than those paid at the auctions a fortnight ago. A few more bales were also sold privately at the auction limits. No Cartagena was offered; privately, 4*s.* 9*d.* is asked. The London stocks are depleted, and the outlook is regarded as good for a further advance.

KOLA.—Good West Indian sold at 4*1*/*2**d.* per lb., and for fair small to bold darkish halves and whole seed (21 barrels) 3*1*/*2**d.* was paid, with 9 bags of dark and slightly mouldy also at 3*d.* to 3*1*/*2**d.* per lb.

A report from Hamburg states that there has been a brisk demand during the past month, and no important supplies have entered the market. Prices are therefore tending higher at the following quotations: African washed, large, 4*1*/*2**d.* to 5*1*/*2**d.*, medium size 4*1*/*2**d.*, and quarters 4*1*/*2**d.* per lb., c.i.f.

OIL, LIME.—Fair West Indian distilled brought 1*s.* 5*d.* per lb., being steady.

RHUBARB.—Dull of sale at easy rates, a small business being done in round and flat Canton pickings, with three-quarters fair pinky fracture at 10*1*/*2**d.* per lb. No High-dried was disposed of, 1*s.* per lb. being wanted for medium to bold flat, with three-quarters pinky fracture, remainder grey and dark.

SARSAPARILLA.—Genuine grey Jamaica continues scarce, only 10 bales being offered; 1s. 2d. was refused for fair, 1s. 6d. being the buying-in price. Two bales of sea-damaged brought 1s. 1d. per lb. Of Native-Jamaica 5 bales sold at 7½d. to 8d. per lb. for medium dull yellowish. No good red was offered.

SENNA.—A special room on the top floor of the Commercial Sale-rooms had been set aside for viewing the principal offerings of Tinnevelly senna, and buyers appeared well pleased with the arrangement, which of course enabled them to give more attention to quality than is usual under the ordinary conditions. There was excellent competition in auction, and the whole 960 packages sold at slightly irregular but very steady to rather dearer prices, especially when it is considered that the quality was not quite so good as that offered a fortnight ago. Fair bold greenish sold at 3d. to 3½d., medium and small greenish 2d. to 2½d., and ordinary specky and badly sea-damaged 1½d. to 2d. per lb. Pods sold at 1½d. per lb.

QUILL.—Ordinary yellowish and dull seconds, from Messina (40 bags), sold, without reserve, at 1½d. per lb.

STICKLAC.—Seven bags of blocky sea-damaged sold at 8d. 12s. 6d. per cwt., subject.

WAX, BEES'.—Jamaica was quiet, only 5 barrels being disposed of at 7l. 5s. per cwt. for ordinary brown, with a few red pieces. The bulk was held at from 7l. 10s. to 7l. 12s. 6d. Zanzibar wax was rather firmer, 29 packages being disposed of at 6l. 12s. 6d. for ordinary. For good bleached Calcutta, 7l. 7s. 6d. per cwt. was wanted.

Heavy Chemicals.

The general condition of the heavy-chemical market has not undergone any material change since last writing. Although the business done during the past week has scarcely been so heavy, a very satisfactory amount has nevertheless been concluded, and that both on prompt and forward account, and, generally speaking, the outlook is a fairly promising one. Values for the most part keep on the firm side, and are maintained at recent rates.

ALKALI-PRODUCE.—Business is well up to the average in this department, and forward requirements are being steadily covered. Bleaching-powder maintains a steady tone, while caustic soda is on the firm side, and tends towards higher figures. Ammonia alkali and soda crystals are in good demand, and steady at late figures. Chlorates are in better demand, and prussiates are also firmer.

SULPHATE OF AMMONIA keeps steady, though business is rather quiet. Tendency, however, seems upwards. Beekton 12l., Beekton terms 11l. 16s. 3d., London 12l., Leith 11l. 17s. 6d. to 11l. 18s. 9d., and Hull 11l. 16s. 3d.

BENZOLS, with an appreciably heavier business passing, are better in tone, and values are higher—90-per-cent. at 9½d. to 9½d. per gal., and 50-per-cent. at 7d. to 7½d. per gal. Aniline oil and salts are moving rather better, and are maintained at 4½d. to 4½d. per lb. respectively.

BROWN ACETATE OF LIME.—Scarcity continues, and prices keep advancing, and run nominally now from 7l. to 7l. 10s. per ton, c.i.f.

BICHROMATES OF POTASH AND SODA are in fair request at unchanged figures. Bichromate of potash, English and Scotch deliveries, 3d. per lb., less 2½ per cent. Glasgow, and export figure 2½d. per lb. net, f.o.b. Glasgow. Bichromate of soda, English and Scotch deliveries, 2½d. per lb., less 2½ per cent. Glasgow, and export 2d. per lb. net, f.o.b. Glasgow.

American Drug-market.

New York, September 20.

Business shows a slight improvement, and the outlook for fall trade is good.

ALOES.—Recent arrivals of Curaçoa have been all taken up, and the market is firm at 3½c. to 4c. Demand is fairly good.

CASCARA SAGRADA is firmer, both on the spot and Pacific Coast. New bark on the spot is firmer and tending upward, only limited amounts now being available at 8½c. Up to 9c. is asked.

COCAINE is firm, but demand has fallen off and bulk goods are still offered at \$3.50.

COD-LIVER OIL.—Norwegian is in good inquiry, and business is being done at \$44 to \$48, according to brand.

CUBES are dull, and the market is weak, with 7½c. to 8½c. asked, according to quality.

ERGOT is firmer in view of improving demand. Russian is held at 40c., and Spanish at 41c.

CANTHARIDES.—Spot supplies are light, and the market is firmer for all varieties. Chinese have advanced to 50c., and Russian to \$1.10.

GOLDEN SEAL is a little easier, some dealers at collecting-points being anxious to sell. Quotations are down to \$1.30.

IPÉCAC.—Río is firmer, at \$1.20, and Cartagena at \$1.15. **MENTHOL** is exciting considerable interest. After selling down to \$2.75 the market has taken a turn, and \$3.25 is now an inside quotation with higher prices daily looked for. Dealers are not selling freely at this price, as most stocks on hand cost considerably more.

OPTUM is a trifle easier, and \$2.65 will buy.

PEPPERMINT OIL continues to attract attention. Dealers are not willing to pay \$4, and the market is a little easier. Some oil has been offered from the West at \$3.85, and on the spot offerings have been made at \$3.75. It is doubtful if dealers can keep present prices, and there are already indications of a lower range in the near future. H.G.H. can be obtained at \$3.75.

SARSAPARILLA.—Small lots are coming in, but the market remains firm at 12½c. to 13c.

SENEGA.—Western is quiet at 70c. to 75c.

SASSAFRAS-BARK.—Good quality bark is held at 12c., but some inferior lots are offered at 10c.

Liverpool Drug-market.

Liverpool, September 28.

BEESWAX continues in steady demand, with small sales at 7l. 5s. to 8l. 2s. 6d. per cwt., according to quality.

CALABAR BEANS.—For a recent arrival at auction there were no bids; 3d. per lb. is wanted.

CANARY-SEED.—For Spanish 90s. per quarter has been paid; 80s. is wanted for Turkish, and 85s. for Mazagan.

CARNAUBA WAX.—Considerable sales of grey have been made at reduced quotations. The price of yellow is still maintained at 135s. per cwt.

CASTOR OIL.—In spite of further arrivals of good seconds, stocks still continue very limited, and quotation remains unchanged. The market is practically bare of French in the absence of any arrivals.

CHILIAN HONEY.—Small sales of fine Pile X have been made at 32s. per cwt. Lower grades are still wanted.

COCOA-NUT OIL.—Holders of French Cochin are very firm, at 33s. per cwt., and stocks are very limited.

FENUGREEK-SEED.—Firm, at 8s. 6d. per cwt., both on the spot and for early arrival.

GUINEA GRAINS.—Twenty bags have been sold for export on private terms. Holders are still firm, at 37s. 6d. per cwt.

JABORANDI-LEAVES.—Eleven bales have been sold at 5d. per lb.

QUILLAIA-BARK.—Five tons has been sold on private terms.

German Drug-market.

Hamburg, September 27.

Business remains still very quiet, and there is little doing in drugs at present.

ANISEED.—Russian is firm, at 38m. per 100 kilos.

ANTIMONY is very quiet, at 27m. to 26m. per 100 kilos.

BALSAM PERU is firm, at 9½m. per kilo.

CAMPHOR.—Refined shows rather more interest from the buyers; second-hand is quoted 495m. to 500m. per 100 kilos.

CARNAUBA WAX is dull, at from 215m. to 270m. per 100 kilos, according to quality.

CANTHARIDES are very scarce. Russian can probably be had at 900m. per 100 kilos.

CASCARA-SAGRADA is quiet, owing partly to forced sales in London; spot is quoted 90m. and forward 75m. per 100 kilos.

ERGOT from Spain is firm, and Russian is quiet at 330m. to 325m. per 100 kilos.

FENUGREEK for shipment is quoted 17½m. per 100 kilos.

IPÉCACUANHA is unchanged; selected Río is quoted 12m. to 12½m. per kilo., and Cartagena 11m. per kilo.

LYCOPODIUM.—Spot is very scarce, but there are not many buyers at present high prices of 850m. to 875m. per 100 kilos.; new crop for shipment may be had at 750m.

MENTHOL is dull, on the spot at 23½m. per kilo., and forward is cheaper.

JAPANESE WAX is quiet, at 110m. to 107m. per 100 kilos.

GOLDEN-SEAL is firmly held at 14m. per kilo.

SENEGA is unchanged at 700m. per 100 kilos.

SPERMACETI is dull of sale, at 185m. per 100 kilos.

WORMSEED is firm, at 120m. per 100 kilos.

OILS (FIXED).—Castor is quiet; first-pressing in barrels is quoted 42½m. per 100 kilos., and forward 43m. Linseed, palm-kerneil, and rape are quiet. Wood is steady, at 52m. per 100 kilos., and cod-liver is quiet, at 145m. to 155m. per barrel.

OILS (ESSENTIAL).—Star-anise seed is firm, at 114m. per kilo. Peppermint is firm, H.G.H. at 16½m. per lb., and Japanese dementhrolised at 14m. per kilo.

WIDNES SULPHUR COMPANY (LIMITED).—Capital 1,000l., in 57 shares. The first directors are J. Hargreaves and W. J. Palmer (managing directors). Qualification, 5 shares. Registered office, the Works, Widnes, Lancs.